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May 5, 2014

California High Speed Rail Authority
Board Members
Attn: Final EIR/EIS Comment
770 L Street, Suite 800
Sacramento, California 95814

Ms. Stephanie Perez
Enviro. Protection Specialist
Federal Railroad Administration
1200 New Jersey Avenue, SE., MS-20
Washington D.C. 20590

Subject: Comments on Final EIR/EIS Fresno to Bakersfield

Dear Board Members and Ms. Perez,

On April 18, 2014 the California High Speed Rail Authority (Authority) released the Final EIR/EIS for public review. At the same time the Authority announced that a public meeting would be held on May 6, 2014 for public comments and another meeting on May 7, 2014 for potential adoption of the Final EIR/EIS. Based upon my review of the Final EIR/EIS I strongly encourage the Authority to postpone the adoption of the document and work with local agencies, groups and concerned citizens to ensure that comments filed by others and the included comments are properly address, as the Final EIR/EIS does not comport with CEQA and NEPA in its current form.

Given the limited time to review the Final EIR/EIS, I request that the California High Speed Rail Authority postpone any final approval of the document until a later date (if necessary the June 2014 Authority Board Meeting). If the Authority wishes to call a vote for the approval of the document, I urge the Board to weigh the comments and questions below as they are only a very limited set given the inability to review all of the information (that which has changed from the Draft Revised EIR/EIS to the Final EIR/EIS) and deny the approval of the Final EIR/EIS.

I also reserve the right to provide further comments in the future regarding the Final EIR/EIS as the time allotted to the public for review is inadequate.

Time Constraints

The Authority should note the immense amount of data, changes and responses that were provided in the Final EIR/EIS, and the short 18 calendar days to review this information. The responses in the Final EIR/EIS provided to questions on the Draft and Revised Draft EIR/EIS constituted 4,800+ pages of information. By providing a public comment period of only 18 days, any meaningful and complete review by the public is unrealistic and the Authority is on notice that this violates the rights of the public to a fair and equitable participation in the environmental process.

This short comment period is contrasted against the numerous years the Authority took to draft the first Draft EIR/EIS, the approximately 12 months the Authority took to draft the Revised

Draft EIR/EIS and the 18 months the Authority took to modify and provided responses to the Revised Draft EIR/EIS and produce the Final EIR/EIS. In total, the Authority was given over 5 years of document preparation, while the public was only afforded a few months to review the entire 30,000+ page document.

For these reasons and many others, the process implemented by the Authority has limited the ability of the public to a fair and equitable review of the propose project.

Comments on Final EIR/EIS

Introduction

Page 1-7

The Final EIR/EIS makes the following statement:

"Because a minimum of 100 miles of track is needed to demonstrate train speeds of up to 220 miles per hour (mph), the Fresno to Bakersfield Section would provide a sufficient length of track for testing the trains. The Fresno to Bakersfield Section is critical for demonstrating system performance, commissioning trains, and obtaining the safety certification needed before service can be permitted."

This statement was added to the document and provides a new project objective, which changes the project description. During the review and commenting of the Draft and Revised Draft EIR/EIS, the inclusion of the system being used as a "test track" was not a project component. With the use of the system as a "test track" new and unanalyzed impacts are introduce such as:

- New safety concerns introduced by utilizing the system as a "test track"
- New sound impacts as the system may not have the ability to meet the documented levels.
- Inability to meet air quality reductions if test systems are not able to achieve established benchmarks.

Because the use of this system was previously not explained as a "test track" the Final EIR/EIS introduces a new component to the Project Description. Therefore the new component should be analyzed in the Final EIR/EIS and recirculated for public review.

Air Quality and Global Climate Change

Page 3.3-17

The Final EIR/EIS makes the following determination on the amount of water use for the individual stations:

The water consumption rates of 15.33, 16.79, and 18.07 million gallons per year were used at the Fresno, Bakersfield, and Kings/Tulare stations, respectively. Wastewater was estimated as 8.43, 9.23, and 9.86 million gallons per year for the Fresno, Bakersfield, and Kings/Tulare stations, respectively.

The values determined to not seem to meet the common belief the higher ridership stations such as Fresno and Bakersfield would use higher rates of water compared to a Kings/Tulare station. I

recommend that the Authority ensure that the calculations provided properly reflect the true water consumption.

Page 3.3-31

The Final EIR/EIS introduces for the first time a section called Local Impacts from Construction Activities. This section acknowledges the significant impacts associated with construction and provides new and qualitative analysis of the impacts. This information as it is newly presented to the public is critical to ensuring that impacts are identified, analyzed and mitigated. Due to the lack of time to review the newly provided information, under CEQA and NEPA, newly introduced impacts and analysis must be recirculated for public review.

Cumulative Impacts Page 3.19-1

The Final EIR/EIS established a cumulative review that addresses adjacent sections of the project, namely the Fresno to Merced and Bakersfield to Palmdale sections. The information added to the Final EIR/EIS and not included in the Draft of Revised Draft EIR/EIS indicates:

"including adjacent sections of the HST System"

With the inclusion of two new sections of environmental impacts and analysis, the public was restricted from a review based upon this new information. Had the initial Draft and Revised Draft EIR/EIS provided this statement the previous public review would have included this information. Given the addition of a SIGNIFICANT amount of new analysis and potential impacts, the Final EIR/EIS is required under CEQA and NEPA to be recirculated for public review.

Comment I032-86

As stated in comments provided the noise measurements shown in Figure 3.4-4 through 3.4-8 are along an alignment west of the current proposal. The response provided by the Authority indicates that these are characteristic of the general area and can be applied to the BNSF alignment which is to the east.

This statement is incorrect and lacks the detail of support information to establish grounds for a response. The samples taken are located just east of a major highway and closer to the city of Hanford. Also located along the path are several industrial facilities located to the west of the readings (from north to south). As one travels further to the east (which is approximately 1/2 away) the area becomes much more rural and agricultural. There is no highway system and there are no industrial facilities that would raise the ambient noise levels.

Comment I032-89

In the Revised Draft EIR/EIS the Authority indicated that in the No Project alternative the BNSF trains would still use the freight lines and therefore would introduce noise to the area. The distinction is that proposed alignment through Kings County is several miles away from the BNSF rail lines, therefore the ambient comparison between the No Project and the HSR alternative. The document misleads the reader to believe that the ambient noise level without the project would be the sound levels of the BNSF, however this is completely wrong given the

BNSF line is several miles away. As stated, the ambient noise level around the alignment near my home is approximately 45 dBA, whereas a BNSF train can be as loud as 85 dBA.

The Response the question does not address this concern and misleads the reader again towards a faulty explanation.

Comment I032-90

The Draft EIR/EIS indicates that construction noise impacts are moderate under CEQA, however fails to give a timeframe for the sound impacts. The response indicated that the schedule for construction and timeframe could not be obtained at this time, therefore at this time the Authority cannot seemingly define if the impact is low, moderate or severe. Construction noise that last several months can be seen as moderate as it has potential to impact quality of life (sleep patterns, relaxation, stress levels and attention), however if a project were to last for 5+ years, which is a half of a decade, that would seem to be a severe impact.

Without the ability to define the length of the impact, the Authority cannot make a judgment on the severity of the impact. The Authority should provide an estimate of construction before making an assumption of the severity of the impact.

Comment I032-102

When asked to provide data that indicates that there are no impacts from stray voltage the responses provided by the Authority indicated:

In regard to dairy production, McGill University conducted a study with cows in pens exposed to controlled EMF levels of 330 mG and 10 kV/m, the projected magnetic and electric fields that occur at ground level under a 735-kV line at full load. The researchers measured the following: melatonin levels, prolactin levels, milk production, milk fat content, dry-matter intake by cows, and reproductive outcomes. While a few statistically significant changes in these factors were found, none of the changes were outside the normal range for cows (McGill University 2008). The study concluded that the EMF exposure did not harm the cows or reduce milk productivity. Various studies cited by other researchers regarding EMF and wildlife suggest a range of effects similar for livestock, from non-existent to relatively small to positive. One study suggests a beneficial application for ELF-EMF in broiler chickens to fight a common parasitic infection called Coccidiosis (Golder Associates 2009).

Because 735-kV utility power transmission lines run up and down the state, cattle and people near those lines are exposed to these levels on a continuing basis. Consistent with the McGill study, epidemiological evidence does not indicate that cattle or people near existing 735-kV utility power transmission lines are generally or broadly affected by the fields.

California HST traction power 60-Hz current will flow in the overhead contact system (OCS) and running rails to provide power to trains. The traction power system is called a 2x25 kV system because it uses 25 kV voltage for the trains and uses two nearby cables with opposite phase of the 25 kV to distribute the power down the tracks. Currents in this

California HST 2x25 kV system create EMFs and static electric fields near the HST tracks. However, the HST levels will be lower than the fields typical of a 735-kV utility power transmission line. This is because the separation between California HST OCS cables is less, cable-to-cable voltage levels and cable current levels are less, and the HST cables are closer to the ground so that they are closer to the reducing effect of the fields in the ground, all compared to the 735-kV utility power cables.

California HST TM 300.07, EIR/EIS Assessment of CHST Alignment EMF Footprint, shows that at the closest fence line to the HST tracks, the expected magnetic field is 60 mG, less than one-fifth the level from a transmission line. Since cattle cannot be inside the fence line and people can only be inside the fence line at passenger stations, the possible HST EMF exposure is:

* Low compared to the 735 kV utility power transmission line.

* Therefore, below the level at which the McGill study showed no effect on cows and milk production.

Similarly, the electric field from the California HST 25 kV 60 Hz OCS will be low compared to the exposure from a 735-kV utility power transmission line. For these reasons, EMF effects on livestock and poultry are expected to have negligible intensity under NEPA, and the impact would be less than significant under CEQA. See Standard Response FB-Response-AG-06: Confined Animal Facilities regarding the impact of EMF emissions on dairies.

This is information and analysis that is supportive of the findings in the Draft Revised EIR/EIS, however was not provided. As this is new and vital information provided to the public, the Draft Revised EIR/EIS should include this information and be recirculated for review and comment.

Conclusion

Based upon my cursory review of the Final EIR/EIS the California High Speed Rail Authority and the Federal Railroad Administration has tried to placate their responsibilities to CEQA and NEPA by loosely identifying impacts to our communities and trying to reassure the public that "everything is going to be okay." Unfortunately, all of the impacts have not been identified, mitigation measures are either missing or lack any detail that would indicate their feasibility, and the project as a whole is misconstrued as a high-speed rail system between San Francisco and Los Angeles. The public, including myself has participated at every juncture of this process to provide comments, concerns, information and even tours when needed. Unfortunately all of that work is not reflected in the Final EIR/EIS. As the word "Final" is utilized in this document, it seals the fate of our community and our agricultural heritage, therefore I cannot say with any sense of confidence that this document does anything to protect our community from environmental impacts. **I strongly urge the California High Speed Rail Authority to refrain from adopting the Final EIR/EIS.**

Sincerely,



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May 5, 2014

VIA E-MAIL, OVERNIGHT MAIL, AND HAND DELIVERY (TO CHSRA BOARD)

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Re: Comments on Final Project Environmental Impact Report/Environmental Impact Statement for California High-Speed Train, Fresno to Bakersfield Section (SCH# 2009091126)

Dear Chairman Richard, Honorable Board Members, and Messrs. McLoughlin and Valenstein:

On behalf of Citizens for California High Speed Rail Accountability ("CCHSRA"), the County of Kings ("County"), and the Kings County Farm Bureau ("KCFB") (collectively, the "Clients"), we are providing comments on the California High-Speed Train Project ("Project"), Fresno to Bakersfield Section, Final Environmental Impact Report/Environmental Impact Statement ("FEIR/S") prepared by the Federal Railroad Administration ("FRA") and the California High Speed Rail Authority ("Authority") for the high speed rail section between Fresno and Bakersfield ("Section").¹

As discussed further below, based on our review we believe the FEIR/S fails to respond adequately to the Clients' and others' comments on the Draft EIR/EIS ("DEIR/S") and Revised Draft EIR/EIS ("RDEIR/S"), and thus, the environmental analysis of the Section, conducted pursuant to the California Environmental Quality Act ("CEQA") and the National Environmental Policy Act ("NEPA"), remains fundamentally flawed. The failure to adequately respond to comments on the DEIR/S and RDEIR/S further highlights the document's legal inadequacies.

¹ Unless otherwise specifically noted, references to the "Authority" include both the CHSRA and the FRA.

At the outset, we object to the Authority's decision to provide only a minimal amount of time for the public and other agencies to review the FEIR/S prior to the scheduled certification meetings on May 6th and 7th. The FEIR/S was released for review on Friday, April 18, 2014, just eleven business days before the final meetings. Rather than allowing the public and interested agencies more time to review the substantially revised analysis and the responses to extensive public and agency comments, which would have fostered more meaningful public participation and sound decision-making, the Authority has decided to provide only two weeks to review thousands of pages of revised analysis and hundreds of responses to comments. At a minimum, and as CCHSRA has previously requested, the Authority Board should postpone its consideration of this FEIR/S for certification so that the public and interested agencies have sufficient time to review the revised analysis and responses and provide additional feedback. Accordingly, we request that the Authority reschedule its final meetings for the Section to its next regularly scheduled Board meeting in early June 2014.

As stated in a recent letter to the U.S. Army Corps of Engineers ("Corps"), and as further explained below and in the attached and referenced exhibits and evidence, the EIR does not provide a sufficient basis upon which to base project approval and other necessary permits and entitlements.² We urge the Authority not to certify the FEIR/S in its current state and to recirculate a new Revised Draft EIR/EIS that responds to the significant environmental issues we and other commenters have identified.³

² See Letter from CCHSRA, County of Kings ("County"), and Kings County Farm Bureau ("KCFB") to Army Corps, dated March 28, 2014 ("Coalition's Letter to Corps re PP1 404 Permit"). We incorporate this letter by reference and request that this letter be included in the administrative record for the Section and FEIR/S.

³ This letter has been drafted in collaboration with Douglas Carstens and Michelle Black at Chatten-Brown & Carstens LLP.

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I. Introduction

As described in more detail in CCHSRA's October 17, 2012 letter commenting on the RDEIR/S, CCHSRA is a grassroots, non-profit corporation based in Kings County, California, working to ensure that the proposed California high-speed train project does not adversely affect the economy, environment, or the quality of life of California's existing communities. CCHSRA's members are California residents, farmers, business people, and landowners who are concerned that the Project will have significant negative impacts throughout the state, and particularly on natural resources and agricultural operations in the Section area. Some of CCHSRA's members have lived, worked and farmed in the San Joaquin Valley for generations. Others have settled here more recently, but are equally committed to preserving the strength and vitality of existing farms, businesses and communities. Because of the high-speed rail Project's potential for extreme local, regional, and statewide environmental, economic, and social impacts, CCHSRA has been actively engaged for several years in the public review process related to the Authority's environmental analysis of high-speed rail line alternatives.

As described in the County's comments, the County of Kings is a political subdivision of the State of California representing a population of approximately 153,000 people. The County has long been concerned with the impacts of the Project within its jurisdiction and has repeatedly urged the Authority to coordinate its planning and environmental review for the Project. The County maintains that the Authority has failed to adequately coordinate and consult with County officials and leaders.

Kings County Farm Bureau is a California nonprofit corporation representing approximately 800 farm, ranch, and agribusiness families in Kings County. The purposes of the KCFB include protecting agricultural lands in the County and preserving agricultural heritage and the rural character of the County. The Project directly threatens a substantial portion those agricultural lands and indirectly impacts much more.

Our Clients continue to have significant concerns regarding that analysis, and remain particularly alarmed by the fact that – in contravention of Proposition 1A – the Authority is considering rail alignments that would disrupt intact agricultural lands and locate rail corridors on pristine greenfields rather than use existing transportation corridors. We reiterate that alternative alignments adjacent to State Route 99 (SR-99) or Interstate 5 (I-5), are in fact environmentally superior options in comparison to the BNSF Railway ("BNSF") alignment options, because these options could primarily use existing transportation corridors and would have fewer environmental impacts. Additionally, an I-5 alternative would be substantially less expensive to construct, would provide faster service between the State's major urban centers in Northern and Southern California, and may have higher ridership and, by extension increased public benefits.

For good reason, the stated NEPA purpose and CEQA objectives for the HST system call for protection of California's unique natural resources, including its agricultural lands, and use

of existing transportation corridors.⁴ Identifying alternatives consistent with those objectives and purpose would not only ensure the EIR's legal adequacy, it would protect a way of life at the very core of California's history and development. As such, the EIR's failure to evaluate alternatives that are consistent with these purposes and objectives poses an imminent threat to the livelihoods of CCHSRA and KCFB members, residents of the County, other residents of the San Joaquin Valley, farmers and those dependent on a vibrant agricultural economy, as well as dislocated business owners and their employees.

As discussed in more detail below, due to its failure to adequately respond to many comments on the RDEIR/S and remedy the significant flaws those and other comments identified, the FEIR/S is critically deficient. It must be substantially revised and recirculated.

With this background, we respectfully make the following comments on the FEIR/S. Please note, however, that, due to the constrained time period afforded to the public to review the FEIR/S, we are unable to comment on every deficiency in the substantially revised document and in the voluminous responses to comments. We have strived to be comprehensive, but reserve the right to supplement these comments. We also do not waive any of our prior comments but incorporate them herein.⁵ We support and join the separate comments from the County of Kings, the City of Bakersfield, Dignity Health, and other similar comments concerning the FEIR/S. Finally, we hereby request notice of any and all actions taken concerning the Section, or any portion of the Section.⁶

II. Comments on the FEIR/S

A. The FEIR/S Improperly Segments the True Overall Project, the ICS, Resulting in Piecemeal Environmental Analysis Masking the True Project's Environmental Impacts.

As we and others have explained in prior comments,⁷ a project description must include "the whole of [the] action," the entirety of the project.⁸ A lead agency may not "piecemeal" or "segment" a project by splitting it into two or more segments for analysis in separate environmental documents. This approach prevents environmental considerations from being "submerged by chopping a large project into many little ones – each with minimal potential

⁴ See FEIR/S, pp. 1-6 – 1-7.

⁵ These prior comments include, but are not limited to: DEIR/S and RDEIR/S comment letters submitted by CCHSRA members' legal counsel and consultants during the public review periods, KCFB and County comment letters on the DEIR/S and RDEIR/S, the two letters submitted on behalf of the Clients in October and November 2013, and the letter submitted to the U.S. Army Corps of Engineers ("Corps") in late March 2014 on behalf of the Clients.

⁶ See Pub. Resources Code, § 21092.2; see also 40 CFR § 1506.6(b).

⁷ See, e.g., FEIR/S, p. 39-15 [City of Bakersfield comments re RDEIS]; see also Coalition's Letter to Corps re PP1 404 Permit, pp. 2-4, 16-19.

⁸ See *Santiago Water District v. County of Orange*, 118 Cal.App.3d 818, 829-30 (1981).

impact on the environment – which cumulatively may have disastrous consequences.”⁹ NEPA also prohibits lead agencies from segmenting a project in order to avoid NEPA obligations.¹⁰ Under NEPA, connected actions and proposals must not be separated for consideration in separate impact statements, and this principle applies in particular with actions that are “closely related.”¹¹

Here, as stated in comments on the RDEIR/S and most recently explained again in the Coalition’s Letter to the Army Corps regarding a Clean Water Act (“CWA”) section 404 Permit for PP1, the Initial Construction Section (“ICS”) is the true project that should have been analyzed in the RDEIR/S. The Authority has improperly piecemealed by dividing the analysis into two EIRs, resulting in underreported and under-mitigated significant environmental impacts. It also has prevented responsible decisionmakers and the public from understanding the on-the-ground impacts of constructing the entire ICS. The first-tier EIR program-level documents do not provide this information, and neither do the two second-tier project-level EIRs prepared for the two neighboring sections.

According to the FEIR/S, the division of the Project into station-to-station sections for the purpose of project-level environmental review is logical.¹² This approach may have appeared acceptable when the Authority and FRA conducted their program-level reviews, but it now fails to comply with CEQA and NEPA because of the severely constrained funding for the Project and the plan for constructing in the Central Valley only the ICS with available funds. The agencies have known these constraints and this plan since late 2010, well before the DEIR was released for public review. Once they knew what would actually be built with available funds, the agencies should have redefined the “project” for environmental review purposes as the ICS.¹³

By failing to do so, the Authority and FRA have not produced environmental documents that accurately report and mitigate the impacts of the ICS. Because of this fundamentally flawed approach, to determine the impacts of the ICS, one must ferret them out by reviewing two EIR documents, each thousands of pages long. Even then, one would not be fully apprised

⁹ *Bozung v. Local Agency Formation Comm’n*, 13 Cal.3d 263, 283-84 (1975).

¹⁰ *See, e.g., Thomas v. Peterson*, 753 F.2d 754 (9th Cir. 1985); *see also Save Yaak Comm. v. Block*, 840 F.2d 714 (9th Cir. 1988).

¹¹ 40 C.F.R. § 1508.25(a)(1).

¹² *See, e.g., FEIR/S*, p. 35-49. The FEIR/S also states that the Section is sufficiently long to be used for train testing. FEIR/S, p. 1-7. While possibly true in theory, this statement is misleading in that the Authority and FRA have long known that they intend to construct the ICS and use the ICS for train assembly and testing.

¹³ *See Banning Ranch Conservancy v. City of Newport Beach* (2012) 211 Cal.App.4th 1209, 1226 [“Some tipping point exists at which the [initial] project would do so much of the work needed by the [subsequent] project that the two projects would become one. Their implementation would be sufficiently interdependent in practice, even if theoretically separable, and a piecemealing challenge would be well founded”], citing *Tuolumne County Citizens for Responsible Growth, Inc. v. City of Sonora* (2007) 155 Cal.App.4th 1214, 1230.

of the ICS Project's impacts.¹⁴ The Authority's responses to comments concerning piecemealing the ICS ignore this issue.¹⁵

In addition, this FEIR/S and the EIR for the Merced to Fresno section ("M-F EIR") do not complete the analysis of the "logical" sections. The Authority deferred complete analysis of the central Chowchilla Wye alignment and deferred a decision on this alignment. The Authority now plans to defer complete analysis of the alignment through Bakersfield and defer its decision concerning that alignment. Thus, even if it was acceptable for the Authority to divide the project-level analysis into station-to-station sections, it did not complete the analysis, as required. The incomplete analysis of both sections, resulting in two section EIRs that do not even provide the same station-to-station logical justification, undercuts the Authority's claim that its analysis of these two sections, rather than the ICS, was permissible.

B. Despite Recent Superficial Additions to the Cumulative Impacts Analysis, the FEIR/S Fails to Analyze the Section's Cumulative Impacts in Combination with Neighboring Section Impacts.

It was not permissible to analyze two Project sections in two separate EIRs rather than the ICS in one EIR. But even if it was allowable, the FEIR/S for the two Sections are deficient for another reason: they both fail to consider the Section's cumulative impacts in combination with the cumulatively considerable contributions of neighboring sections' impacts.

The FEIR/S added language to the Cumulative Impacts Section of the FEIR/S asserting that the impacts of neighboring sections were considered.¹⁶ However, this new language is mere superficial window dressing, as there is scant evidence in the analysis or in any technical reports that supports these assertions. On the contrary, except for two, the technical reports supporting the FEIR/S impact analyses are completely silent with respect to the ICS and neighboring sections.¹⁷ One exception is the Air Quality Technical Report. This report includes

¹⁴ Because the analysis contained in the EIR for the Merced to Fresno section ("M-F EIR") provides information concerning some ICS impacts, we cite to the M-F EIR analysis. We request that the entire M-F EIR be made part of the administrative record for the Section.

¹⁵ See, e.g., FEIR/S, p. 39-470 [response to Bakersfield's comment that the Authority has piecemealed the ICS].

¹⁶ See, e.g., *id.* at pp. 3.19-1 [analysis considered Section and its regional context, "including adjacent sections of the HST System"], 3.19-2 ["Where relevant to the analysis for a particular resource, the cumulative impacts of construction and operation of adjacent HST sections (Merced to Fresno and Bakersfield to Palmdale) are considered"].

¹⁷ See Hydrology and Water Resources Technical Report [no mention of ICS or neighboring sections in analysis of Section's impacts]; see also Geology, Soils, and Seismicity Technical Report [same]; see also Hazardous Wastes and Materials Technical Report [same]; see also Noise and Vibration Technical Report [same]; see also Transportation Analysis Technical Report [same]; see also Community Impact Assessment Technical Report [same]; see also Archaeological Survey [same]; see also Supplemental Archaeological Survey Report [same]; see also Historic Architectural Survey Report, p. 8-1 [study corridor "extends south from downtown Fresno, traverses rural Fresno, Kings, and Tulare counties, and terminates in unincorporated Kern County, east of the city of Bakersfield"]; see also Supplemental Historic Architectural Survey Report, p. 4-1 [Area of Potential Effect ("APE") modified to exclude area added to M-F Section APE in order to "facilitate the first phase of construction for the overall HST project"]; see

a table that reports the combined emissions of constructing the Merced to Fresno Section and the Fresno to Bakersfield Section.¹⁸ One major problem with this table, however, is that the complete sections will not be built as part of the ICS, so the information concerning construction-period impacts presented in this table is not accurate and is of limited informational value – it does not reflect the actual construction phasing and schedule (which starts with CP1).

The other exception is the Biological Resources Technical Report. While this report mentions the cumulative impacts of the section when combined with the neighboring Merced to Fresno section, it does not present any detailed information concerning the combined impacts, does not discuss how the impacts could contribute to cumulative impacts, and dismisses the significance of the cumulative impacts, asserting that avoidance and minimization measures and compliance with regulatory requirements would mitigate all cumulative impacts to biological resources.¹⁹ This superficial and dismissive discussion of cumulative impacts to important biological resources is inappropriate for state and federal agencies responsible for protecting such resources.

Commenters criticized, among many other issues, the failure to consider the contributing impacts of neighboring Project sections in the analysis of cumulative impacts. In response to these and other similar comments, the Authority has added some references to neighboring sections to the discussion of some cumulative impacts, but it did not analyze these impacts in any meaningful way. Further, the Authority failed to address all of the types of cumulative impacts from neighboring sections. As discussed further below, the sporadic references to neighboring sections in FEIR/S section 3.19 do not evidence any real attempt to consider the Section's impacts together with other sections' impacts. Any claim that the neighboring sections' cumulative impacts were considered is undermined by both the constrained study area/geographic scope for each impact type as well as the underlying technical reports, which do not demonstrate consideration of these cumulative impacts. Consequently, by failing to analyze the cumulative impacts of neighboring sections, the Authority failed to proceed in the manner required by law.

Of course, the Merced to Fresno section's contributing cumulative impacts should have been quantified and discussed in depth, as a 24±mile portion of this section will be constructed together with most of the Section, to form the ICS. The M-F EIR was certified two years ago, so

also Appendix 3.6-B, Water Usage Analysis Technical Memorandum [no analysis of water supply and demand for ICS or neighboring sections, analysis focuses exclusively on Section's water demand and supply]. While Appendix 3.19-B mentions the Bay to Basin phase of the Project, there is no evidence that analysts actually considered the cumulative impacts of various sections of this phase, including, most importantly, the impacts of what will be constructed first, the portion of the neighboring Merced to Fresno section comprising the northern 24 miles of Construction Package 1 ("CP1"). CP1 bid and contract documents are incorporated herein by reference. We request that these documents be included in the administrative record for the Section.

¹⁸ See Air Quality Technical Report, pp. 7-59 – 7-60.

¹⁹ See Biological Resources and Wetlands Technical Report, pp. 5-212 – 5-213.

the Authority and FRA have had plenty of time to consider the impact analysis in that document when preparing the cumulative impact analysis for the instant FEIR/S. Yet, the Authority and FRA have largely ignored the well-developed plans to build the ICS and analyzed in isolation the impacts of two arbitrarily defined and incomplete sections.

1. Purpose and Requirements for an Adequate Analysis of Cumulative Impacts.

“Cumulative impacts” are “two or more individual effects which, when considered together, are considerable or ... compound or increase other environmental impacts.”²⁰ Analysis of cumulative impacts is necessary because “[t]he full environmental impact of a proposed ... action cannot be gauged in a vacuum.”²¹ Cumulative impact analysis involves considering the proposed project’s incremental impacts in combination with the contributing impacts of other past, present, and reasonably probable foreseeable future projects.²² Projects undergoing environmental review at the time another project is considered for approval are considered reasonably foreseeable and must be considered in a cumulative impact analysis.²³

Where multiple pending projects will combine to produce cumulative impacts, “[p]roper cumulative impacts analysis is absolutely critical to meaningful environmental review.”²⁴

One of the most important environmental lessons evident from past experience is that environmental damage often occurs incrementally from a variety of small sources. These sources appear insignificant, assuming threatening dimensions only when considered in light of the other sources in which they interact.”²⁵

“[I]t is vitally important that an EIR avoid minimizing the cumulative impacts. Rather, it must reflect a conscientious effort to provide public agencies and the general public with adequate and relevant detailed information about them.”²⁶ CEQA mandates “... that environmental considerations do not become submerged by chopping a large project into many little ones – each with a minimal potential impact on the environment – which cumulatively may have

²⁰ 14 Cal. Code Regs. (“CEQA Guidelines”), § 15355(a)-(b).

²¹ See *Whitman v. Bd. of Supervisors* (1979) 88 Cal.App.3d 397, 408; see also *San Joaquin Raptor/Wildlife Rescue Ctr. v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 739-740; see also *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1214-15 (*Bakersfield*), quoting *Las Virgenes Homeowners Federation, Inc. v. County of Los Angeles* (1986) 177 Cal.App.3d 300, 306.

²² *Bakersfield, supra*, 124 Cal.App.4th at pp. 1214-1215.

²³ See *San Franciscans for Reasonable Growth v. City and County of San Francisco* (1984) 151 Cal.App.3d 61, 74-75.

²⁴ *Bakersfield, supra*, 124 Cal.App.4th at p. 1217, emphasis added.

²⁵ See *Los Angeles Unified School Dist. v. City of Los Angeles* (1997) 58 Cal.App.4th 1019, 1024-1025 (L.A. USD), quotations omitted.

²⁶ *San Franciscans for Reasonable Growth, supra*, 151 Cal.App.3d at p. 79.

disastrous consequences.”²⁷ “The danger of filing separate environmental documents for the same project is that consideration of the cumulative impact on the environment of the two halves of the project may not occur.”²⁸

Courts review claims concerning the adequacy of cumulative impacts analysis for an abuse of discretion. Specifically, the Court must determine:

[W]hether it was reasonable and practical to include the projects [in the analysis] and whether, without their inclusion, the severity and significance of the cumulative impacts were reflected adequately. [Citation.] “The disparity between what was considered and what was known is the basis upon which [a court will] find an abuse of discretion.” [Citation.]²⁹

Here, it is hard to imagine a clearer case for considering the cumulative impacts from interconnected sections of the same large Project.

2. Arbitrarily Narrow and Unexplained Geographic Scope

Cumulative impact analysis begins with defining the geographic scope. “Lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used.”³⁰ The geographic scope to be analyzed “cannot be so narrowly defined that it necessarily eliminates a portion of the affected environmental setting.”³¹ An unduly constrained geographic scope for cumulative impacts analysis risks underestimating the significance of a project’s contribution to impacts that appear insignificant in isolation but when viewed together appear startling.³²

With respect to each of the following resource areas, the geographic scope for considering cumulative impacts was arbitrarily and impermissibly constrained: transportation; noise and vibration; electromagnetic fields (EMF) and electromagnetic interference (EMI); public utilities and energy; hydrology and water resources; hazardous materials and wastes; safety and security; socioeconomic, communities and environmental justice; station planning,

²⁷ *Citizens Assn. for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal.App.3d 151, 165 (Bishop), quoting *Bozung, supra*, 13 Cal.3d at pp. 283–284; *Berkeley Keep Jets Over the Bay Com. v. Board of Port Comrs.* (2001) 91 Cal.App.4th 1344, 1358 (Berkeley).

²⁸ *Bishop, supra*, 172 Cal.App. 3d at p. 166.

²⁹ *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 723 (*Kings FB*), citing *San Franciscans for Reasonable Growth, supra*, 151 Cal.App.3d at pp. 74–77; see also *Bakersfield, supra*, 124 Cal.App.4th at p. 1215.

³⁰ See CEQA Guidelines, § 15130(b)(1)(B)(3).

³¹ *Bakersfield, supra*, 124 Cal.App.4th at p. 1216.

³² See *Kings FB, supra*, 221 Cal.App.3d at p. 721. Notably, the *Kings FB* case cited a letter from the Attorney General’s office that criticized the limited scope of the cumulative air quality impact analysis and stated “no justification appears for limiting the projects considered to the mid-valley area, in light of the approximately 116 cogeneration plants planned for the San Joaquin Valley.” *Ibid.*

land use and development; agricultural lands; parks, recreation and open space; aesthetics and visual quality; and cultural and paleontological resources.³³ The geographic scopes for each of these impact areas was too narrow because they left out contributing cumulative impacts for some impacts (e.g., traffic, air quality, noise) in neighboring parts of the same city (such as in Fresno and Bakersfield) and for other impacts (e.g., agriculture, biological resources, hydrology and water resources, public utilities and energy) in other Central Valley regions, such as in the County of Madera (where the rest of the ICS will be built).³⁴

Further, the FEIR also failed to provide any explanations for the geographic scope selected for each area of cumulative impact analysis, as required pursuant to Guidelines, section 15130(b)(3).³⁵ In this respect, the FEIR was similar to that EIR prepared in *Bakersfield*, where “no explanation was offered as to the criterion upon which [the determination of a constrained geographic scope] was made.”³⁶ This arbitrary approach violates CEQA.

³³ See FEIR/S, pp. 3.19-6 [transportation geographic scope confined to Fresno, Kings, Tulare, and Kern counties, omitting from consideration ICS transportation impacts in Madera County], 3.19-14 [noise and vibration study area confined to within 2,500 feet the Section’s alternative alignments, omitting ICS transportation impacts in Madera County], 3.19-17 [EMF and EMI geographic scope confined to areas adjacent to Section’s alternative alignments and HMF facility alternatives studied in this FEIR/S], 3.19-18 – 3.19-23 [public utilities (including water supply and solid waste/recycling) and energy geographic scope confined to Fresno, Kings, Tulare, and Kern counties, omitting ICS transportation impacts in Madera County], 3.19-27 [hydrology and water resources scope confined to the Section area and upstream and downstream reaches of crossing streams and rivers, omitting ICS hydrology and water resources impacts in Madera County], 3.19-32 [hazardous materials and wastes scope confined to 1 mile on either side of Section alternative alignments, omitting ICS hydrology and water resources impacts in Madera County], 3.19-34 [safety and security scope confined to the “the transportation system and fire protection, law enforcement, and other emergency response service areas in Fresno, Kings, Tulare, and Kern counties and in the cities of Fresno, Hanford, Corcoran, Wasco, Shafter, and Bakersfield,” omitting ICS safety and security impacts in Madera County], 3.19-35 – 3.19-37 [socioeconomics, communities and environmental justice scope confined to “the cities of Fresno, Hanford, Corcoran, Wasco, Shafter, and Bakersfield, and the unincorporated areas of Fresno, Kings, Tulare, and Kern counties in the immediate vicinity of the Fresno to Bakersfield HST alternatives,” omitting ICS socioeconomic, community and environmental justice impacts in Madera County], 3.19-40 [station planning, land use and development scope confined to “cities of Fresno, Hanford, Corcoran, Wasco, Shafter, and Bakersfield and Fresno, Kings, Tulare, and Kern counties,” omitting ICS socioeconomic, communities and environmental justice impacts in Madera county], 3.19-41 [agricultural lands scope confined to Fresno, Kings, Tulare, and Kern counties, omitting ICS impacts to agricultural lands in Madera county], 3.19-43 [parks, recreation and open space scope confined to “1,000 feet on either side of the HST alignment” within the Section area, omitting ICS parks, recreation and open space impacts in Madera county], 3.19-45 [aesthetics and visual quality scope confined to the Section’s potential viewshed in Fresno, Kings, Tulare, and Kern counties, omitting ICS aesthetics and visual quality impacts in Madera county], 3.19-48 [cultural and paleontological resources scope confined to the Section’s area of potential effects (within Fresno, Kings, Tulare, and Kern counties), omitting ICS impacts to cultural and paleontological resources in Madera county].

³⁴ See *ibid.*

³⁵ See *Bakersfield*, *supra*, 124 Cal.App.4th at p. 1216.

³⁶ *Ibid.*

3. Failure to Analyze Contributing Cumulative Impacts from Neighboring Sections

Clearly, the neighboring sections are reasonably foreseeable future projects, especially the Merced to Fresno section (or at least the southern 24 miles of this section) – environmental review was underway for the four neighboring Central Valley sections when the DEIR/S was being prepared for the Section.³⁷ It was obvious to the Authority and FRA as early as December 2010 that parts of two sections would first be built together as the ICS. Yet, the FEIR did not identify the neighboring sections as pending or future projects in the lists provided as appendices to the cumulative impacts analysis.³⁸ The FEIR/S's discussion of cumulative impacts for almost every resource area fails to consider the cumulative impacts of the Section in combination with the contributing cumulative impacts of each of the other Central Valley sections. More specifically, the discussions in FEIR/S section 3.19 concerning cumulative noise, EMI and EMF, public utilities, hydrology and water quality, hazardous materials, and socioeconomic and environmental justice impacts caused by Section construction and operation are completely silent concerning the contributing cumulative impacts caused by the Merced to Fresno section, the Bakersfield to Palmdale section, the San Jose to Merced section and the Merced to Sacramento section.³⁹ These impacts from neighboring sections will combine, especially where the sections meet (i.e., in Merced, Fresno, and Bakersfield), making the impacts greater than when considered in isolation.

The discussion of cumulative construction traffic mentions the possibility of Merced to Fresno section construction contributing to these impacts, but the discussion does not disclose or address construction phasing and the attendant traffic. Cumulative traffic impacts will certainly occur in downtown Fresno and downtown Bakersfield where neighboring sections meet. This is especially true with respect to the Authority's long-standing plans to first construct the ICS. These well-developed plans involve constructing a portion of the Section together with a portion of the adjacent Merced to Fresno section through the City of Fresno.⁴⁰ Because the Authority's simultaneous construction of a large portion of this neighboring section is virtually certain, the FEIR/S was required to analyze the associated cumulative impacts. The superficial, unsupported,⁴¹ and unelaborated statement that construction period cumulative traffic impacts may occur is insufficient. Similarly, the analysis fails to consider the operational

³⁷ See FEIR/S, pp. 40-763 – 40-771 [Notices of Preparation ("NOP") for other Central Valley sections].

³⁸ See FEIR/S, Appendix 3.19-B [listing only Bay to Basin phase of project as a future transportation project, with no information concerning its phasing]. This Appendix does not give any information concerning CP1, the northern portion of the ICS or the neighboring Bakersfield to Palmdale section.

³⁹ See FEIR/S, pp. 3.19-14 – 3.19-17 [noise cumulative impact analysis does not mention the other Project sections], 3.19-17, 3.19-18 – 3.19-23, 3.19-27 – 3.19-31, 3.19-32 – 3.19-33, 3.19-35 – 3.19-39.

⁴⁰ See Exh. A: RFP Map for CP1.

⁴¹ Again, the Transportation Technical Report does not mention the ICS, nor does it address the construction-period traffic impacts of the portions of CP1 within the Merced to Fresno section.

traffic impacts that the Merced to Fresno section (and the ICS) will cause.⁴² The Authority and FRA do not have sufficient evidence to conclude that the Construction Transportation Plan that will be prepared and the traffic mitigation measures will be sufficient to reduce these traffic impacts to LTS levels.

While the cumulative air quality impact analysis purports to consider the impacts of the “HSR project,” it does not mention the other Central Valley sections of the Project, provides no information concerning construction phasing (including information concerning the construction of the ICS), and is not supported by a technical report that demonstrates the impacts of all Central Valley sections were considered in the analysis.⁴³ As a result, the FEIR/S underreports the Section’s cumulative air quality impacts when combined with the other contributing sections.

The discussion of cumulative impacts on biological resources during construction purports to consider the impacts of constructing neighboring sections. However, the analysis does not provide any information concerning construction phasing, does not provide any quantitative information concerning impacts that will be caused by other Project sections, and typically concludes, without any supporting evidence, that the Section’s contribution to construction-period impacts on biological resources will be less than cumulatively considerable.⁴⁴ The one exception to the typical conclusions of LTS impacts concerns the Section’s contribution to limiting wildlife movement. For this impact, the FEIR/S makes inconsistent statements. In a single paragraph, the FEIR/S concludes that the Section’s contribution to cumulative impacts to wildlife movement corridors would be cumulatively considerable and, a few lines down, that it would not be.⁴⁵ The former conclusion is more likely correct, given the resource agencies’ persistent concerns regarding the Project’s impacts on wildlife movement. The FEIR/S failed to identify mitigation for the Section’s cumulatively considerable contribution to limiting wildlife movement in the Tulare Basin.

The discussion concerning the Section’s cumulative impacts on the availability of aggregate resources also purports to consider construction of the Project. However, upon inspection, it is clear that only the building material requirements for the Section were

⁴² See FEIR/S, pp. 3.19-8 – 3.19-9.

⁴³ See *id.* at pp. 3.19-9 – 3.19-14.

⁴⁴ See *id.* at pp. 3.19-23 – 3.19-24. This is a problem that pervades the FEIR/S analysis: the discussion of impacts typically concludes with a finding of a LTS impact, while presenting little to no evidence that design features and mitigation measures will be effective in reducing impacts to low levels. See, e.g., *id.* at pp. 3.19-25 – 3.19-26 [concluding, with no citation to supporting evidence or analysis, that the Section would not contribute to cumulative impacts to special-status plant and wildlife species]. The FEIR/S could have easily reached the opposite conclusion (i.e., the cumulative impacts will be significant). Without citations to evidence and analysis, how can the public verify that this conclusion is supported and accurate?

⁴⁵ See *id.* at p. 3.19-25.

considered.⁴⁶ How cumulatively considerable will the Section's impacts to aggregate resources be when combined with the Merced to Fresno section's impacts? According to M-F EIR, that section will require an additional 1,675,000 to 2,700,000 tons of aggregate (approximately), 680,000 to 1,000,000 cubic yards of fill (assuming no fill is provided by project excavation), and for elevated structures with slab track, an additional 11,240 to 63,280 cubic yards of aggregate.⁴⁷ Will the region's permitted aggregate quarries have sufficient supply to meet the demand from both sections (and the three other Central Valley sections)? The FEIR/S does not address this issue.

The discussion concerning the Section's cumulative impacts to safety and security mentions the Merced to Fresno and Bakersfield to Palmdale sections, but it fails to provide any information concerning Project construction phasing and how the actual phasing of ICS construction could cause cumulative impacts in this area.

The discussion concerning the Section's cumulative impacts to station planning, land use, and development also claims to consider the contributing cumulative impacts of constructing the neighboring sections.⁴⁸ However, as with the other areas of impact analysis, the discussion fails to provide any information concerning construction phasing. Without this information, and careful consideration of how construction activities for neighboring sections can (and will) overlap, the cursory and conclusory discussion of cumulative impacts in this area is not supported by substantial evidence.

The discussion concerning the Section's cumulative impacts to agricultural lands asserts that the analysis was based in part on "the Merced to Fresno and Bakersfield to Palmdale sections," however, this claim is unsupported by any citation, reference, or substantiation.⁴⁹ If this is an attempt at incorporation by reference under CEQA and NEPA, it is woefully inadequate. The remainder of the discussion concerning cumulative impacts to agricultural lands does not include any reference or information concerning the contributing cumulative impacts of the Merced to Fresno section. Since there is no technical report or appendix

⁴⁶ Compare *id.* at p. p. 3.19-31 ["As discussed in Section 3.9.1, the HST project would use approximately 0.6% of the currently permitted aggregate resources in the region"] with *id.* at 3.9-2 ["the proposed HST segment would require about 2.3 million tons, which represents approximately 0.6% of the currently permitted aggregate resources in these five areas"]. The analysis of impacts to aggregate resources in section 3.9 focuses on the requirements of the Section and associated impacts. It is completely silent regarding neighboring sections of the Project.

⁴⁷ M-F FEIR, p. 3.9-2. The actual amount of fill dirt required for all or even a portion of the Merced to Fresno section and all or even a portion of the Fresno to Bakersfield section may be much more than reported in either of the EIRs. Contractors preparing responses to the Request for Proposals for CP2 and CP3 are reporting the need for approximately 20 to 30 million cubic yards of fill dirt. If the actual need for fill dirt exceeds the amount reported in the EIRs, then the M-F EIR impact analysis must be supplemented and the FEIR/S for this section must be revised and recirculated. We discuss this issue further in Section III, *infra*.

⁴⁸ See FEIR/S, p. 3.19-40.

⁴⁹ See *id.* at p. 3.19-42.

supporting the analysis for agricultural lands impacts, there is no substantial evidence supporting the analysis of the Section's contribution to agricultural land impacts caused by Project sections in the Central Valley.

The Authority's failure to consider these cumulative impacts is especially important in light of the large-scale disruption, destruction, and changes that constructing the ICS will have on the region and, indeed, the entire San Joaquin Valley. The Authority's analysis of the Section's cumulative impacts in isolation from neighboring Project sections is not a "conscientious effort to provide public agencies and the general public with adequate and relevant detailed information about them" as required by CEQA.⁵⁰ The Authority's approach obscures the Section's contribution to cumulative impacts caused by all four Central Valley sections of the Project.

4. The Flawed Attempt at Tiering Does not Excuse the Inadequate Analysis of Neighboring Sections' Cumulative Impacts.

The Authority relies on its "tiered" approach to environmental review for the analysis missing in the EIR/S.⁵¹ However, the analysis of cumulative impacts is inadequate because FEIR/S section 3.19 does not provide the reader with any roadmap to the PEIR/S information and analysis upon which the FEIR/S analysis of cumulative impacts supposedly relies. Such a roadmap is required under CEQA and is especially important here given the voluminous and complex nature of environmental review for this Project.⁵²

Further, "[t]iering does not excuse the lead agency from adequately analyzing reasonably foreseeable significant environmental effects of the project and does not justify deferring such analysis..."⁵³ CEQA explicitly requires the analysis of cumulative impacts of several related projects, regardless of whether the agency has employed tiering in its environmental review.⁵⁴ The Authority's tiering scheme does not excuse its lack of cumulative impact analysis of neighboring sections.

Moreover, even if the attempt at tiering were not flawed, the Statewide PEIR (the only PEIR that the Section's FEIR effectively tiers off of) plainly fails to analyze the cumulative

⁵⁰ *San Franciscans for Reasonable Growth, supra*, 151 Cal.App.3d at p. 79.

⁵¹ See FEIR/S, p. 35-5 [Standard Response GEN-01, asserting that relevant PEIR/S analysis and information is incorporated by reference per CEQA Guidelines, § 15150]; see also FEIR/S, p. 3.19-1.

⁵² See *Vineyard Area Citizens for Responsible Growth, etc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 443 (*Vineyard Area Citizens*) ["When an EIR uses tiering or incorporation, it must give the reader a better road map to the information it intends to convey"], citing CEQA Guidelines, § 15150, 15153.

⁵³ CEQA Guidelines, § 15152(b).

⁵⁴ CEQA Guidelines, § 15165 ["Where one project is one of several similar projects of a public agency, but is not deemed a part of a larger undertaking or a larger project, the agency may prepare one EIR for all projects, or one for each project, but shall in either case comment upon the cumulative effect"].

impacts of all Central Valley sections in sufficient detail.⁵⁵ The FEIR/S does not explain the extent to which impact analysis has been deferred to the project level, nor does it provide any explanation concerning the adequacy of the PEIR/S analysis for the purpose of substituting for the analysis of cumulative impacts at the second-tier level. Moreover, the Statewide PEIR also relied on incorrect assumptions: it assumed the project's footprint would be only 50 feet wide and would be mostly within or adjacent to existing transportation corridors.⁵⁶ In contrast, the Authority is now planning, with a few exceptions, a 120-foot-wide corridor (except in areas where tracks are elevated) that does not share any existing freight or public rights-of-way.⁵⁷ In addition, much of this Section's alignment will likely deviate substantially from existing transportation corridors. These differences further undermine any claim that the Statewide PEIR adequately addresses neighboring sections' cumulative impacts.

If future project-level reviews for the remaining sections also ignore, downplay, or gloss over the contributing cumulative impacts of neighboring sections, the full scope of the Project's impacts will almost certainly never be disclosed and mitigated. The Clients maintain that the ICS should have been analyzed as the CEQA and NEPA "project." But even if the station-station approach is allowable, the FEIR/S would still need to be revised to fully consider the Section's cumulative impacts when combined with neighboring sections.

⁵⁵ In fact, the Statewide PEIR explicitly deferred detailed impact analysis for many of these impacts to the project level. See, e.g., Statewide PEIR/S, pp. 3.0-1 [introduction to impact analysis chapter, stating that detailed impact analysis will be conducted at project level: "Only after the alignment is refined and the facilities are fully defined through project level analysis/ and site-specific avoidance and minimization efforts have been exhausted/ would specific impacts and mitigation measures be addressed"], 3.1-5, 3.1-25 [deferred traffic impact analysis on smaller roadways and arterials], 3.4-2, 3.4-26 [deferred detailed noise and vibration impact analysis], 3.7-11 3.7-12, 3.7-25 – 3.7-26 [deferred detailed land use impacts], 3.8-5, 3.8-18 – 3.8-19 [deferred analysis of severance impacts to agricultural lands], 3.9-18 – 3.9-20 [deferred aesthetic impact analysis], 3.10-10 – 3.10-12 [deferred detailed public utilities impacts], 3.11-2 – 3.11-6 [deferred detailed hazardous materials impact analysis], 3.12-8, 3.12-19, 3.12-31 – 3.12-32 [deferred surveys for cultural resources impact analysis], 3.13-12, 3.13-15 [deferred detailed analysis of Geology and Soils impacts], 3.14-2, 3.14-9 – 3.14-10, 3.14-22 – 3.14-23 [deferred quantitative water quality analysis], 3.15-2, 3.15-4, 3.15-28, 3.15-34, 3.15-38 – 3.1539 [deferred field surveys, detailed analysis and avoidance design for impacts to wetlands and other biological resources]; see also CHSRA Resolution No. 05-01, CEQA Findings of Fact, p. 25 [findings re severance impacts to agriculture, stating "[i]t is not possible at the programmatic level of analysis to estimate the number of parcels or acres that could be affected by severance, and will not be possible until the HST system alignments are more refined"].

⁵⁶ See Statewide PEIR/S, pp. S-2, 3.0-1, 3.8-18 [Statewide PEIR, goal to locate Project within existing public and rail rights of way], 3.0-3 [introduction to impact analysis section states "[p]otential impacts are reported only for a corridor width or "footprint" that represents the potential impacts of the system planned/ which is assumed at 25ft. (7.6 m) on either side of centerline (50 ft. (25 m) total width) for HST alignment options"]; see also CHSRA Resolution No. 05-01, CEQA Findings of Fact, p. 22 [finding re land use impacts states "[n]early 70% of the preferred HST system corridor alignments identified in the Final EIR are either within or adjacent to existing transportation corridors"].

⁵⁷ See FEIR/S, p. 2-9 [120-foot wide ROW for typical at-grade profile], 2-61 [102-foot separation from centerline of Section alignment to BNSF ROW centerline, except in urban areas, where separation distance could be less].

C. The Project Alternative Descriptions Remain Incomplete, Misleading, and Generally Inadequate for Environmental Review.

As the Clients discussed in its comment letters on the RDEIS and in its recent letter to the Army Corps,⁵⁸ NEPA and CEQA require that a project description be accurate and consistent throughout the environmental document. Under CEQA, “[a]n accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR.”⁵⁹ This principle applies in the NEPA context, as well.⁶⁰ As noted in the Clients’ recent comments to the Corps, the RDEIR/S (and now the FEIR/S) fails to meet these basic standards.

D. Improperly Deferred Impact Analysis and Mitigation

The Clients have also explained how the RDEIR/S included improperly deferred impact analysis and mitigation.⁶¹ As explained below, many of these major deficiencies in the analysis have not been corrected. The FEIR did not analyze the impacts of new or changed project components, such as:

- The impacts associated with constructing parking facilities for the three stations within the Section area;⁶²
- The visual, construction air quality, traffic and other impacts from substantially increasing the length of sound walls necessary to mitigate HST noise;⁶³
- The impacts of relocating historic buildings, utilities, and other resources that are currently within the project footprint;⁶⁴ and
- The impacts associated with upgrading transmission lines required to bring electricity from substations.⁶⁵

⁵⁸ See FEIR/S, pp. 40-202 – 40-203; Coalition’s Letter to Corps re PP1 404 Permit, pp. 19-24.

⁵⁹ *County of Inyo v. City of Los Angeles*, 71 Cal.App.3d 185, 193 (1977); see also *Kings County Farm Bureau v. City of Hanford*, 221 Cal.App.3d 692 (1990).

⁶⁰ See, e.g., 40 C.F.R. §§ 1502.13, 1502.14.

⁶¹ See Coalition’s Letter to Corps re PP1 404 Permit, pp. 21-22.

⁶² This omission is particularly glaring for the Kings/Tulare Regional Station–East Alternative because station-area parking will not be sufficient to meet the induced demand of approximately 2,800 parking spaces per day. See FEIR/S, pp. 3.2-96, 40-999.

⁶³ See FEIR/S, pp. 3.4-73.

⁶⁴ See *id.* at 3.17-133.

⁶⁵ The Authority claims that because some transmission line upgrades are mentioned in the Alternatives Section and because the TPSS footprints are depicted in Appendix 3.1-A that upgrades for connections to the electricity grid were necessarily considered in the impact analysis. These claims are not supported and are in fact inconsistent with responses to comments that admit subsequent environmental review for these upgrades may be necessary.

In addition, the Authority has previously used the 15% level of design as an excuse for incomplete impact analysis.⁶⁶

1. Improperly Deferred Analysis of Impacts to Biological Resources

Despite incomplete baseline information regarding the presence of rare plants, wetlands and special-status wildlife both on and near the Section's potential permanent and temporary disturbance areas, the FEIR/S concludes that many of the Section's impacts to these biological resources will be reduced to less-than-significant levels through mitigation.⁶⁷ The botanical, wetland and wildlife surveys, however, have not provided an adequate basis for (1) analyzing potential Project impacts or (2) supporting this conclusion as to impacts.

Although the DEIR attempts to analyze the impacts and formulate mitigation measures before adequate survey data are obtained, the analysis and mitigation may change after the additional survey efforts are better able to identify impacts to rare plants, wetlands and special-status wildlife.⁶⁸ The revised baseline data that makes up the affected environment must be shared with the public and the public should have the opportunity to comment. Without this information, the DEIR fails to establish an accurate baseline for biological resources, fails to adequately analyze the Section's impacts to those resources, and proposes inadequate mitigation for such impacts.

2. Improperly Deferred Analysis of Impacts to Agricultural Lands

The perfunctory and unsupported analysis of impacts to agricultural lands exemplifies improperly deferred impact analysis. A key impact of the Section is the loss of agricultural land. CEQA requires careful impact analysis concerning these resources, which are expressly protected pursuant to state statutes.⁶⁹

The Authority concluded that the Section would impact as much as 3,541 acres of important farmland, depending upon the alignment selected (excluding the HMF).⁷⁰ However,

⁶⁶ See M-F FEIR/S, pp. 19-55 [response to comment #456-11, stating "The [Section's] level of design somewhat limits the level of detail that the EIR/EIS can achieve"], 19-78 [response to comment #703-11, stating the same], 19-124 [response to comment #705-3, stating the same], 19-152 [response to comment #582-9, stating the same].

⁶⁷ *Id.* at pp. 3.7-131 - 3.7-150.

⁶⁸ Indeed, Authority consultants have expressed the desire to reduce the amount of compensatory mitigation that will be required by conducting post-approval protocol-level surveys that will likely find fewer impacted resources than the so-called "conservative" "presumed present" approach.

⁶⁹ See Pub. Resources Code, § 21095; see also CEQA Guidelines, Appendix G(II); Cal. Land Conservation Act of 1965 (Williamson Act), Gov. Code, § 51200 et seq.; Cal. Farmland Conservancy Program Act, Pub. Resources Code, § 10200 et seq.; see also *County of Colusa v. California Wildlife Conservation Bd.* (2006) 145 Cal.App.4th 637, 651-52 ["The Williamson Act ... recognizes the importance of agriculture to the economy of the State of California and seeks to maintain agricultural use on the agricultural land"].

⁷⁰ See FEIR/S, pp. 3.14-35 – 3.14-40, 3.14-47.

as explained below, the FEIR likely underestimated these impacts. Because the FEIR did not disclose how it applied various factors to determine whether agricultural operations could continue on a severed remainder parcel and did not disclose the breakdown between those severed parcels counted towards the total impacts and those not counted, the conclusions are unsupported by evidence.⁷¹ The FEIR/S also fails to consider long-term impacts to agricultural lands caused by severed utilities and infrastructure, such as irrigation and drainage canals and internal access roads.⁷² This issue cannot be easily remedied with financial compensation; severing facilities may fundamentally compromise the viability of agriculture on these properties.⁷³ Finally, the FEIR/S only describes severance of undefined “large” parcels; it is silent concerning the severance of potentially hundreds of smaller parcels.⁷⁴ Because severance impacts to small parcels may have a more severe effect on the viability of agriculture on the severed parcels, the FEIR/S should have analyzed and reported on these impacts as well.

In its analysis of the Merced to Fresno section’s severance impacts to agricultural lands, the Authority did not engage in the detailed analysis of the impacts caused by parcel severance because “[d]etermining the economic feasibility of a large number of individual remainder parcels is not reasonably feasible because of the many local and parcel-specific factors that determine whether the parcel remains economically viable for farming.”⁷⁵ The FEIR/S for this Section presents a similarly incomplete analysis. Yet it previously admitted that detailed severance analysis is required at the project-level EIR level.⁷⁶ (Because it utilized tiering, the

⁷¹ The Agricultural Lands Section cites a “memo on the Remnant Agricultural Parcel Analysis (2013).” FEIR/S, p. 3.14-10. However, this memo is not included as a technical appendix to the FEIR/S, is not available on the Authority’s website, and is not adequately incorporated by reference. Thus, the Authority cannot rely on this memo to fill the analytical gaps in the FEIR/S analysis.

⁷² See *id.* at p. 3.14-45 [assuming all impacts related to severing infrastructure and utilities will be resolved, leading to no long-term impacts to agricultural lands]. The Authority’s response to comments concerning this issue promises this analysis later, on a case-by-case basis, during the compensation and condemnation valuation processes. See, e.g., *id.* at pp. 35-29 – 35-31 [Standard Response GEN-04], 40-1004 [response to comment BO093-29].

⁷³ See, e.g., *id.* at pp. 40-1046 [farmer, dairy operator and farm bureau comments re severance impacts and responses], 39-774 [Kings County comments L029-127 – L029-130, L029-326 re severance impacts to agricultural operations and potential long-term impacts].

⁷⁴ See *id.* at pp. 3.14-46, 3.14-63.

⁷⁵ See M-F FEIR/S, pp. 20-242 [response to comment 717-17]; see also FEIR/S, p. 35-147 [AG-02– “the Authority will address the effects of individual parcel severance, and impacts on individual farm roadway access, during the right-of-way acquisition process”].

⁷⁶ See 2005 PEIR/S, p. 3.8-5 [“Potential severance locations are discussed qualitatively, not quantitatively, in this program-level document. Parcel-specific information is also not considered in this program-level analysis. Project-level farmland conversion and severance impacts that are determined to be significant adverse impacts would be addressed in subsequent project-level documents”], emphasis added, 3.8-19 [second-tier analysis will provide a more precise evaluation of impacts to agricultural lands]; see also 2005 PEIR/S, Vol. II, pp. 3-9, 3-13 [DOC comments and response]. Note that the 2005 PEIR/S stated that the entire statewide project could convert between “2,559 to 3,850 acres” (and the Authority considered this to be a “conservative” estimate because of the potential to share existing RR ROW). See 2005 PEIR/S, p. 3.17-8; see also Vol. II, pp. 3-9 [DOC comment that the PEIR/S likely

Authority should have explained the extent to which this analysis was deferred. Instead, it placed the burden on diligent members of the public to comb through thousands of pages of documents to determine this.)

This entire approach constitutes impermissible abdication of impact analysis obligations. The Authority failed to satisfy its obligation under CEQA to provide “sufficient meaningful information regarding the types of activity and environmental effects that are reasonably foreseeable” from the Section.⁷⁷ As a result, the FEIR underreported impacts to agricultural lands, making even the limited mitigation adopted less effective. Post-approval financial compensation (even assuming there is sufficient funding and the Authority provides fair compensation) is not a substitute for CEQA analysis.

3. Improperly Deferred Mitigation

An EIR must propose and describe mitigation measures sufficient to substantially lessen or avoid the significant adverse environmental impacts identified in the EIR.⁷⁸ Where several mitigation measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified.⁷⁹ The environmental document must also evaluate the efficacy of mitigation measures.⁸⁰

Deferral of mitigation is improper when mitigation details can be developed and implemented prior to project approval.⁸¹

Essentially, the rule prohibiting deferred mitigation prohibits loose or open-ended or performance criteria. Deferred mitigation measures must ensure that the applicant will be required to find some way to reduce impacts to less than significant levels. If the measures are loose or open-ended, such that they afford the applicant a means of avoiding mitigation during project implementation, it

underestimated the impacts to ag lands]. Now, we know that this Section alone will convert more than 3,000 acres (and this estimate may also be too low, as it may not count all noneconomic remainder parcels).

⁷⁷ See *Stanislaus Natural Heritage Proj. v. County of Stanislaus* (1996) 48 Cal.App.4th 182, 206 [failure to describe impacts associated with supplying water to development project].

⁷⁸ Pub. Resources Code, §§ 21002, 21002.1(a), 21081(a), 21100(b)(3); CEQA Guidelines, §§ 15126.4, 15370.

⁷⁹ *Id.* at § 15126.4(a)(1)(B).)

⁸⁰ *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 669-670 [“[A]fter first presuming that special-status species will be present in or near the vernal pools, the EIR leaves the reader in the dark about what land management steps will be taken, or what specific criteria or performance standard will be met, if this presumption is confirmed by the later protocol studies. The success or failure of mitigation efforts in regard to impacts on such vernal pool species may largely depend upon management plans that have not yet been formulated, and have not been subject to analysis and review within the EIR. The fact that the future management plans would be prepared only after consultation with wildlife agencies does not cure these basic errors under CEQA, since no adequate criteria or standards are set forth.”].

⁸¹ *Sacramento Old City Assn. v. City of Sacramento* (1991) 229 Cal.App.3d 1011, 1027.

would be unreasonable to conclude that implementing the measures will reduce impacts to less than significant levels.⁸²

A lead agency may not make the required CEQA findings unless uncertainties regarding the mitigation of significant environmental impacts have been resolved.⁸³ When mitigation is improperly deferred, the public and decisionmakers are deprived of the opportunity to evaluate its effectiveness or desirability prior to project approval.⁸⁴

A number of proposed mitigation measures in the FEIR/S do not satisfy CEQA's requirements. For example, the following measures lack adequate, specific, performance standards:⁸⁵

- SO-MM#2 – the measure requires the Authority to “minimize impacts associated with the project alternatives in all existing communities” through an outreach program, but minimizing impacts will not necessarily reduce them to LTS levels;
- SO-MM#3 – the measure calls for consultation with appropriate respective parties “to minimize the disruption of facility activities and services,” but minimizing this disruption by reconfiguring or relocating facilities before removing existing facilities does not necessarily mean that the disruption will be reduced to LTS levels;⁸⁶
- SO-MM#4 – the measure requires the Authority to “evaluate with property owner input the effectiveness of providing overcrossings or undercrossings of the HST track to allow continued use of agricultural lands and facilities,” but this evaluation will not necessarily lead to overcrossings or undercrossings for any impacted property owner. The measure lacks any criteria that will be considered when determining whether an overcrossing or undercrossing will be provided;
- N&V-MM#3 – the various options presented for mitigating noise impacts lack specific performance standards. At a minimum, the Authority should commit to mitigating all severe noise impacts to LTS levels;

⁸² *Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 208 Cal.App.4th 899, 945.

⁸³ *See Federation of Hillside & Canyon Assoc. v. City of Los Angeles* (2000) 83 Cal.App.4th 1252, 1259.

⁸⁴ *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 92 [EIR inadequate when mitigation depends “upon management plans that have not yet been formulated, and have not been subject to analysis and review within the EIR.”].

⁸⁵ This is not an exhaustive list of deficient mitigation measures. Time constraints imposed by the short review period limit our ability to identify every deficiency in this letter.

⁸⁶ *See, e.g.*, FEIR/S, pp. 39-26, 39-487 [Bakersfield’s comment re impacts of relocating corporation yard]; *see also id.* at p. 39-697 [Kern COG’s comments re impacts of relocating Bakersfield High School’s Industrial Arts Building].

- BIO-MM#6 – the measure does not provide any performance standards for “decompaction or re-grading” or other mitigation efforts other than limiting highly-invasive species;
- BIO-MM#9 – the phrase “to the extent feasible” at the end of this measure renders the performance standard hollow;
- BIO-MM#17 – the performance standards for survivability requirements must be developed now, not deferred until after Section approval and development of the plan for salvage, relocation and/or propagation of special-status plant Species;
- BIO-MM#47 – this measure does not include any performance standards for restoring riparian areas impacted by construction;
- BIO-MM#48 – this measure does not include any performance standards for revegetating areas within jurisdictional waters impacted by construction;
- BIO-MM#52 – the phrase “to the extent practicable” modifying the requirement to “minimize ground-disturbing activities within the wildlife linkages ... during nighttime hours” renders the performance standard hollow;
- BIO-MM#53 – this measure lacks any performance standard requiring the equivalent “function and value” for lands used to compensate for impacts on special-status plant species;
- BIO-MM#54 – this measure lacks any performance standards for compensating for impacts on Vernal Pool Fairy Shrimp and Vernal Pool Tadpole Shrimp, compliance with undescribed future USFWS requirements is insufficient;
- BIO-MM#56 – this measure lacks any performance standards for compensating for impacts on California Tiger Salamander, compliance with undescribed future USFWS requirements is insufficient;
- BIO-MM#57 – this measure lacks any performance standards for compensating for impacts on Blunt-Nosed Leopard Lizard, Tipton Kangaroo Rat, and Nelson’s Antelope Squirrel;
- BIO-MM#61 – this measure lacks any performance standards for compensating for permanent riparian impacts. The measure should have included a requirement that there be “no net loss of biological functions and values” or a similar performance standard;
- BIO-MM#62 – this measures explicitly defers the formulation of performance standards: “performance standards, including percent cover of native species, survivability, tree height requirements, wildlife utilization, the acreage basis,

restoration ratios, and the combination of onsite and/or offsite mitigation will be detailed.” The measure states “the final success criteria will be developed in coordination with the regulatory agencies and presented in the CMMP” and provides unenforceable examples of success criteria; and

- BIO-MM#63 – this measure lacks a key performance standard for compensating for permanent and temporary impacts on jurisdictional waters, that there be “no net loss of biological functions and values.”

The FEIR/S concludes that, with implementation of these mitigation measures, impacts will be reduced to LTS levels. This conclusion is improper under CEQA when the measures are not clearly defined, lack enforceable performance standards, lack commitment by the lead agency to implement, and/or have not been agreed to by necessary cooperating agencies.⁸⁷

E. The FEIR/S Fails to Analyze Secondary Impacts from Some Mitigation Measures

An EIR must analyze and discuss the secondary impacts from mitigation.⁸⁸ The lead agency must base its conclusions regarding impacts on substantial evidence.⁸⁹ Despite recent additions, the FEIR/S does not provide the required analysis concerning potential secondary impacts from mitigation.

In direct violation of CEQA’s requirements, the FEIR/S summarily dismissed, without any supporting facts and analysis, the possibility of secondary impacts from the implementation of almost all traffic mitigation measures.⁹⁰ These traffic mitigation measures involve dozens of individual roadway and intersection expansion activities. These types of transportation projects, on their own, have warranted CEQA review.⁹¹ A response to comment acknowledges the possibility of secondary impacts caused by traffic mitigation measures, but then summarily concludes that all such impacts will be minimized to less than significant levels through a

⁸⁷ See *Communities for a Better Environment, supra*, 184 Cal.App.4th at pp. 95-96 [where mitigation measures are not identified and agreed on, the conclusion that impacts will be mitigated is unsupportable].

⁸⁸ CEQA Guidelines § 15126.4(a)(1)(D).

⁸⁹ *Assoc. of Irrigated Residents v. County of Madera* (2003) 107 Cal.App.4th 1383, 1391 (A/R) [EIR must contain facts and analysis, not bare conclusions]; see also CEQA Guidelines § 15384(a).

⁹⁰ FEIR/S, p. 3.2-124; see also Transportation Analysis Technical Report [no analysis of potential secondary impacts from traffic mitigation measures]. The one exception is the brief discussion added to the FEIR/S concerning “Impacts from Mitigation” provided for TR MM#1. FEIR/S, p. 3.2-125. But this conclusory paragraph is not supported by any substantial evidence concerning both the severity of the impacts as well as the effectiveness of design features and applicable mitigation measures to reduce those secondary impacts to LTS levels.

⁹¹ See, e.g., *Riverwatch v. County of San Diego* (1999) 76 Cal.App.4th 1428, 1445 [finding EIR contained information needed to evaluate impacts of the roadway widening necessary for project]; see also *Anderson First Coalition v. City of Anderson* (2005) 130 Cal.App.4th 1173, 1190 [rejecting claim that failure to analyze freeway interchange impacts amounted to piecemealed review, but noting that “the interchange improvements will be subject to environmental review at some point”].

Construction Management Plan. This is unsubstantiated dismissal of secondary impacts does not satisfy CEQA's requirements.

The FEIR/S also failed to adequately analyze the secondary impacts from sound walls and from habitat enhancement and restoration activities, among other mitigation structures and work.⁹²

The Authority summarily dismissed, without any substantiation, the possibility of secondary impacts from traffic and habitat restoration measures. These bare conclusions were prejudicial because they precluded "informed decisionmaking and informed public participation."⁹³

F. FEIR/S Failed to Analyze a Reasonable Range of Alternatives

CEQA requires that an EIR include a reasonable range of alternatives to evaluate the feasibility of reducing the adverse environmental impacts of a proposed project. The CEQA requirement that EIRs identify and discuss alternatives to a proposed project stems from the fundamental statutory policy that, for public project, public agencies should implement feasible alternatives or feasible mitigation measures to reduce the project's significant environmental impacts.⁹⁴

Here, given the FEIR/S's conclusion that the Project will result in significant and unavoidable impacts on a wide range of resources,⁹⁵ the above CEQA requirements dictate that the EIR should have included and considered alternatives that would avoid or reduce many of these impacts or explain why such alternatives are not feasible. Instead, the EIR merely considered the impacts of a No Project Alternative and three very similar alternatives proposed in areas near the BNSF railroad ROW. As numerous commenters have already stated, the EIR preparers should have considered and addressed the I-5 corridor alternative, and other similarly distinctive alternatives, so that the range of alternatives would be sufficiently broad. Rather than evaluate the feasibility and impacts of such an alternative in response to these suggestions, Authority staff have chosen to defend its constrained analysis. As stated in prior comments, the I-5 corridor alternative would indeed accomplish most of the basic project objectives while causing fewer significant impacts.⁹⁶ The 1996 reports upon which the

⁹² See our comments concerning responses to comments BO032-29 and L005-13, *infra*.

⁹³ See *Sunnyvale West Neighborhood Assn. v. City of Sunnyvale* (2010) 190 Cal.App.4th 1351, 1392.

⁹⁴ Pub. Resources Code, §§ 21002.1(a) & (b), and 21081(a); CEQA Guidelines, § 15126.6(a).

⁹⁵ See Proposed CEQA Findings and Statement of Overriding Considerations ("SOC"), pp. 7-1 – 7-2 [SOC identifying significant and unavoidable impacts in the categories of Noise and Vibration, Socioeconomics, Communities, and Environmental Justice, Agricultural Lands, Aesthetics and Visual Resources, Cultural Resources, and Cumulative Impacts].

⁹⁶ See, e.g., FEIR/S, pp. 39-17 – 39-18, 39-22, 40-332; see also Coalition's Letter to Corps re PP1 404 Permit, pp. 35-37.

Authority continues to rely do not provide the substantial evidence required to eliminate this superior alternative from consideration in the FEIR/S analysis.⁹⁷

G. Inadequate Responses to Comments

CEQA requires detailed written responses to comments.⁹⁸

The written response shall describe the disposition of significant environmental issues raised In particular, the major environmental issues raised when the lead agency's position is at variance with recommendations and objections raised in comments must be addressed in detail giving reasons why specific comments and suggestions were not accepted. There must be good faith reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice.⁹⁹

"Problems raised by the public and responsible experts require a good faith reasoned analysis in response. [Citation] The requirement of a detailed analysis in response ensures that stubborn problems or serious criticism are not 'swept under the rug.'"¹⁰⁰ Similarly, NEPA requires federal agencies to assess and consider "all substantive comments" received on a draft EIS.¹⁰¹

During the limited time period within which we have had the opportunity to review the FEIR/S, we have observed numerous misstatements, omissions, inaccuracies and other problems with the Standard Responses and responses to individual comments.¹⁰²

1. Objections to Standard Responses

Table 1 summarizes deficiencies in the Standard Responses.

Table 1 – Inadequate Standard Responses

⁹⁷ See Because the FEIR/S is tiered off of the Statewide Program EIR/EIS, and because this first-tier document cites the 1996 reports, the 1996 reports must be included in the administrative record for the Section.

⁹⁸ PRC, § 21091(d)(2); CEQA Guidelines, § 15088(a), (c) [responses to comments must be detailed and contain "good faith, reasoned analysis"].

⁹⁹ CEQA Guidelines, § 15088(c).

¹⁰⁰ *Santa Clarita Organization for Planning the Environment v. County of Los Angeles* (2003) 106 Cal.App.4th 715, 722-723 (SCOPE), citing *Cleary v. County of Stanislaus* (1981) 118 Cal.App.3d 348, 357; see also *Preservation Action Council v. City of San Jose* (2006) 141 Cal.App.4th 1336, 1359-1360; see also *Rural Land Owners Ass'n v. City Council* (1983) 143 Cal.App.3d 1013, 1020 [failure to respond to comments raising substantial environmental issues may render EIR legally inadequate].

¹⁰¹ See 40 C.F.R. § 1503.4 (requiring NEPA lead agencies to).

¹⁰² Please note that, while many deficiencies with the responses to the Clients' comments are described herein, this letter does not provide a comprehensive discussion of all deficiencies we have observed in the responses. The Authority has simply provided too little time to both conduct a thorough review of all responses to comments and prepare comments that addresses each and every deficiency.

Standard Response	Primary Objection(s)
GEN-01 – Tiering and Level of Detail in Analysis and Mitigation	<p><u>Improper Tiering:</u></p> <p>The Authority’s response ignores one of the most fundamental requirements for tiering under CEQA: the necessity to provide the reviewing public and outside agencies with a roadmap to the analysis upon which the second-tier project-level analysis relies. This requirement does not only apply to documents that use incorporation by reference, as the response implies. The RDEIR/S failed to provide this critical information, leaving the public with insufficient information concerning issues supposedly resolved in the first-tier analysis.</p> <p>The response asserts that the Section is “fully consistent” with the first-tier environmental review. This is not accurate, however, because it ignores some fundamental differences concerning the Project’s design. For example, the 2005 Statewide PEIR and the 2008, 2010, and 2012 versions of the Bay Area PEIR all relied upon the incorrect assumption that the Project’s right-of-way (“ROW”) would be only 50 feet wide in many, if not most, areas.¹⁰³ These PEIRs also assumed that the Project could share existing freight ROW. These assumptions have turned out to be incorrect. The FEIR/S now calculates impacts based upon a 100-foot-wide at-grade ROW and Union Pacific and BNSF would not allow the Project to encroach upon, much less share, their ROW. These fundamental differences render the PEIRs’ impact analysis deficient, but the FEIR/S completely ignores this problem.</p> <p>This Standard Response also fails to address another major problem with this tiering scheme: the implications of decertification. Two of the Bay Area PEIRs were decertified, yet the FEIR/S tiers off of them. CEQA case law is clear, a lead agency is absolutely prohibited from tiering off of a decertified PEIR.¹⁰⁴ Reliance on the decertified PEIR is implicit,¹⁰⁵ and the CEQA foul is mechanical. The response disregards this important issue.</p> <p>The Authority has also failed to adhere to another requirement triggered by the tiering process – the duty to address how the impacts identified in the second-tier analysis contribute to the unmitigated impacts identified in the first tier analysis. The Authority adopted a Statement of Overriding Considerations for both the Statewide and the Bay Area programmatic analysis, but the RDEIR/S and now the FEIR/S do not</p>

¹⁰³ See, e.g., 2005 PEIR, p. 3.0-3 [“Potential impacts are reported only for a corridor width or ‘footprint’ that represents the potential impacts of the system planned, which is assumed at 25 ft. (7.6 m) on either side of centerline (50 ft. (25m) total width) for HST alignment options....”], emphasis added. All of these PEIRs are inconsistent and unclear about what ROW width was assumed for the impact analyses.

¹⁰⁴ See *Friends of Santa Clara River v. Castaic Lake Water Agency* (2002) 95 Cal.App.4th 1373, 1383, quoting Pub. Resources Code, § 21094(a).

¹⁰⁵ See *id.* at p. 1384 [rejecting lead agency’s argument that it did not rely on the decertified Program EIR, noting “respondent’s reliance on the [first-tier EIR] is implicit in the concept of tiering”], citing CEQA Guidelines, § 15152(g).

Standard Response	Primary Objection(s)
	<p>address how this Section contributes to the identified impacts that cannot be mitigated to a less-than-significant level.</p> <p><u>Level of Detail in Analysis:</u></p> <p>The response defends the level of detail in the description of the project and the impact analysis. The Authority's design-build approach to project-level review is inadequate under CEQA. What the Authority calls "design-build" is really "approve now/design later." The approach does not excuse the failure to provide an adequate project description¹⁰⁶ (nothing under CEQA or NEPA allows a lead agency to forgo this requirement if it is proceeding on a design-build basis). The approach failed here:</p> <ul style="list-style-type: none">• The FEIR/S's 15% design omitted information <u>required</u> per the Authority's own design-build guidelines, such as the location of construction staging areas, batch plants, and major utilities;¹⁰⁷• Decisions regarding important project features (with environmental impacts) were put off until <u>after</u> the public comment period and many will be deferred until after Section approval;• The Authority has previously <u>admitted</u> the 15% level of design was insufficient for detailed impact analysis (this admission applies to much more than social-economic impacts, as asserted);¹⁰⁸ and• The Section's vague design invites substantial changes through "value engineering."¹⁰⁹ <p>The FEIR/S vaguely described <u>possible</u> Section characteristics and lacked the details necessary for project-level environmental review. For example,</p>

¹⁰⁶ See *Sierra Club v. Babbitt*, 69 F. Supp. 2d 1202, 1217 (E.D. Cal. 1999) [Design-build approach invalidated on the grounds that "The draft EA speaks in generalities and contains few details of what would actually be done on the Project, thus making it impossible to relate project elements to project impacts. Lacking is sufficient detail to understand the nature, extent and location of rock removal, tree removal, vegetation removal, rebuilding of guardwalls (particularly the height), and construction of fills into the Merced River or riparian corridor"].

¹⁰⁷ See Coalition's Letter to Corps re PP1 404 Permit, pp. 22-23. We hereby incorporate the Authority's 15% design guidelines by reference.

¹⁰⁸ M-F FEIR/S, pp. 19-55 [Response to comment #456-11: "The [Section's] level of design somewhat limits the level of detail that the EIR/EIS can achieve"], 19-78 – 19-79 [Response to comment #703-11: same], 19-152 [Response to comment #582-9: same]

¹⁰⁹ See, e.g., Exh. B: Email Chain re ICS Value Engineering 021312 [planned viaducts may be converted into earthen berms to save money]. These e-mails demonstrate the vulnerability the vague design has with respect to major post-approval project changes without environmental review.

Standard Response	Primary Objection(s)
	<ul style="list-style-type: none">• Water crossing designs were described as optional, and were thus inherently vague;• Key portions of electricity infrastructure were not described or analyzed (e.g., required power sources, substations and reconductoring of transmission lines, etc.);¹¹⁰ and• Irrigation, drainage, and water supply/sewer infrastructure was not specifically identified.¹¹¹ <p>Without specific descriptions of these project components, detailed impact analysis was impossible.</p> <p>The response mentions the surveys that were conducted on accessible parcels, but, as with the rest of the FEIR/S, it fails to identify the parcels that were surveyed or describe the percentage of impacted parcels surveyed.</p> <p><u>Level of Detail in Mitigation:</u></p> <p>The response asserts that performance standards were included in all mitigation measures, thus saving them from the claim of improper deferral of mitigation. As discussed above, however, a number of mitigation measures lack any performance standards or include performance standards that are impermissibly vague.</p> <p>Further, the response relies on the conditions that will be imposed by other agencies when they issue other required permits. These conditions may not suffice for CEQA purposes, however. For example, the SWRCB recently granted the Authority an extension to the deadline to satisfy a condition imposed as part of a Section 401 certification.</p>
GEN-02 – Alternatives	This response attempts to make up for the RDEIR/S's and PEIR's lack of analysis and evidence supporting conclusions concerning the feasibility of an I-5 Corridor alternative alignment. The Statewide Program EIR/S contains a cursory explanation concerning the elimination of the I-5 corridor alternative, but this explanation fails to

¹¹⁰ See FEIR/S, pp. 2-12 – 2-14 [explaining how reconductoring and new electricity infrastructure may be required and deferring description and analysis]; see also FEIR/S, Vol. III, Section C, Part 1 of 2 (File 1 of 5), pp. 17, 20 of .pdf file, (File 3 of 5), pp. 8, 9 and 18 of .pdf file [depicting optional locations for various traction power substations, but not depicting the locations or footprints of electric grid lines that each TPSS would connect to or the footprints for any new or modified electricity infrastructure that would be required at each TPSS]; see also FEIR/S, Vol. III, Section D, Part 2 of 2 (File 1 of 6), pp. 14 and 24 of .pdf file, (File 2 of 6), pp. 45 and 68 of .pdf file, (File 4 of 6), p. 43 of .pdf file, (File 5 of 6), pp. 3, 11, 42, 43 of .pdf file [same].

¹¹¹ See, e.g., FEIR/S, p. 35-96 [PU&E-03], 40-482 – 40-483, 40-496 – 40-497. The Authority simply assumed the many undisclosed conflicts with existing utilities would be solved (but had no basis for doing so).

Standard Response	Primary Objection(s)
	<p>identify the Project needs and purposes that this alternative would not satisfy.</p> <p>In addition, the 1996 studies upon which the Statewide Program EIR/S relies were prepared long before any impact analysis was conducted, before the Union Pacific Railroad ("UPRR") and BNSF objected to the use of or encroachment on their right-of-way, and before members of the public were adequately notified of the major decision to build the track down the heavily-developed and agriculturally-rich center of the San Joaquin Valley rather than along the more sparsely developed and less productive I-5 corridor. CEQA's public disclosure and participation purposes have been fundamentally compromised by the Authority's decision to omit any real analysis of the I-5 corridor alternative from the FEIR/S and from the Statewide PEIRs upon which the FEIR/S relies.</p> <p>The response inconsistently asserts that an I-5 corridor alignment would have lower ridership than the alternatives considered in the FEIR/S, but this claim is false. The studies conducted in the mid-1990s found that an I-5 corridor alignment would have the highest ridership of all corridors studied.¹¹²</p> <p>The response asserts inconsistency with local land use plans as another reason supporting the infeasibility of an I-5 corridor alternative. This is a transparent excuse, however, because the Authority is now considering a preferred alternative that has design features that are inconsistent with local land use plans (e.g., the Hanford station, which conflicts with Hanford's and the County's land use plans). The Authority conveniently heeds local land use restrictions only when they do not stand in the way.</p> <p>The I-5 corridor alternative would meet most of the project objectives and would result in substantially fewer significant environmental impacts. Therefore, the FEIR/S must be revised to consider this alternative and recirculated for public review.</p> <p>The discussion of impacts associated with spur lines ignores the unused railroad lines in the San Joaquin Valley that could be used for spur lines. Reusing and repurposing these underused and defunct freight lines would minimize impacts and costs.¹¹³ It also ignores the extremely expensive requirements to relocate roadways and utilities</p>

¹¹² See Taylor et al., California HSR Corridor Evaluation and Environmental Constraints Analysis, Journal of Transportation Engineering, Jan./Feb. 1997, p. 6; see also Preliminary Environmental Constraints and Impacts Analysis (Parsons Brinckerhoff/JGM, November 1995), Appendix A, page 102 of pdf document at <http://www.calhsr.com/wpcontent/uploads/2013/09/Environmental-Constraints-and-Impacts-Analysis-November-1995.pdf>. These early studies are hereby incorporated herein by reference. We request that these studies be included in the administrative record for the Section.

¹¹³ See FEIR/S, pp. 44-64 – 44-66 [Attachment to Submission 1022 from Larry Miller]. This Standard Response and the response to Larry Miller's comments completely disregard Mr. Miller's suggestion to explore the use of these spur lines. Instead, the FEIR/S treats the spur lines as though they would traverse greenfields in order to eliminate this feasible alternative.

Standard Response	Primary Objection(s)
	in urban areas like Fresno and Bakersfield, the increased costs to mitigate important farmland in the more fertile areas of the San Joaquin Valley, the costs of relocating oil and gas wells, etc.
GEN-03 – HST and Population Growth	<p>Despite receiving numerous comments stating that the population growth estimates relied upon in the RDEIR/S were overstated, the Authority’s general response defends its reliance on these outdated and inaccurate estimates. Recent studies confirm that California’s rate of population growth has slowed and is projected to remain at a slow pace for decades to come. This trend has major implications for the forecasted baseline future conditions used for traffic and air quality analyses as well as ridership projections for the HST, among other things. The FEIR/S must be revised to reflect more accurate population growth trends.</p> <p>The FEIR/S does not include sufficient mitigation measures to address the potential for the Project to induce sprawl. As the EPA recommended with respect to the Merced to Bakersfield EIR,¹¹⁴ the Authority should consider requiring cities to adopt restrictions that would limit sprawl as a condition of being selected as a site for an HSR station.</p>
GEN-04 – Impacts to Ag Lands	As with the FEIR/S, this response provides no substantiation for the calculations of direct impacts to agricultural lands. Without detailed information concerning how analysis calculated the number of acres that would be removed from agricultural production (including the number of acres of “uneconomic” remnant parcels), it is impossible for the public to confirm the accuracy of these conclusions. ¹¹⁵ Based upon the limited information made available in the FEIR/S, we conclude that the FEIR/S substantially underestimates the amount of acres of agricultural lands that will be impacted by the Section.
GEN-13 – Analysis of Interim Use by Amtrak	This response ignores the reality of the Project, as it is being funded and implemented, and instead attempts to maintain and defend the flawed theoretical approach. The Authority is not building two “sections” of the Project, it is building the ICS. The impacts of the ICS should have been analyzed in a single document so that the public and decisionmakers could be informed of the very real environmental consequences of the actions being taken. As it stands, the public and decision-makers would have a very difficult time ferreting out the consequences of constructing the

¹¹⁴ See Exh. C: Letter from EPA to FRA and Authority, dated May 1, 2012, re M-F Administrative Draft FEIR/S, Detailed Comments Attachment, pp. 2-4 [“Based on information provided in the FEIS, however, we strongly suggest that additional commitments are needed from FRA and CHSRA in the ROD in order to prevent significant unplanned, low density HSR induced growth While the FEIS appears to assume that HSR stations will attract well coordinated, relatively denser, infill development, this assumption should be supported with strong commitments, documented and memorialized through the environmental planning process, from FRA and CHSRA”]. This letter is hereby incorporated herein by reference. We request that this letter be included in the administrative record for the Section.

¹¹⁵ See Coalition’s Letter to Corps re PP1 404 Permit, pp. 30-32.

Standard Response	Primary Objection(s)
	<p>ICS and operating Amtrak and HST trains on the ICS from the two separate EIRs prepared for the neighboring sections.</p> <p>The FEIR/S should have analyzed the construction and operational impacts associated with using the ICS for interim Amtrak service. After all, when applying for federal funding in 2010, the Authority relied upon this interim use of the ICS to satisfy the “independent utility” requirement. While interim use by Amtrak is foreseeable, the FEIR/S does not address the associated impacts.</p> <p>The response attempts to fill the gap by providing a cursory discussion of impacts, but this narrative is conclusory, factually unsupported, and incorrect. The discussion, for example, fails to identify all of the impacts that could result from constructing the cross-over tracks that would be necessary to use Amtrak trains on the ICS. Just because these cross-over tracks may be located within the Section’s footprint (an unsupported and dubious claim), does not mean it will have the same or even similar impacts. Building these cross-over tracks could have unique impacts to biological and cultural resources, among other things.</p>
GEN-14 – Oppose HST Project	<p>As with the FEIR/S, Business Plans, and other documents prepared by the Authority the discussion of the Project benefits and its impacts in this response tends to exaggerate the benefits while downplaying the impacts. The response does not provide a fair assessment of the pros and cons of the Project, and of this Section of the Project. Further, it does not address the pros and cons of an incomplete ICS or IOS. How will the benefits compare with the impacts if the Authority cannot complete the ICS or IOS for some prolonged period of time, or indefinitely?</p>
GEN-15 – HMF Decision	<p>Contrary to the assertions made in this response, the Heavy Maintenance Facility (“HMF”) will have to be located within the Section area. The Authority has previously stated that the HMF must be located on a parcel adjacent to the ICS, so that it can be used for train assembly and testing.¹¹⁶ Because none of the HMF alternative locations described in the M-F EIR are adjacent to the ICS, it stands to reason that one of the HMF alternative locations described in this FEIR/S must be selected. Because the HMF is a necessary facility for train “assembly, testing, commissioning, and acceptance,”¹¹⁷ failure to complete the analysis for the HMF constitutes improper piecemealing of the ICS.</p>
GEN-17 – Funding and Project Costs	<p>The discussion regarding funding does not address the more than \$20 Billion in additional funding needed to complete the IOS. What are the ramifications of the Authority begins to construct the ICS but runs out of funds? As with the 2014 Business Plan, the discussion of Project cost estimates provides only unsupported</p>

¹¹⁶ See M-F FEIR/S, p. 20-554 [response to comment #131-2: “[an HMF] will be constructed and outfitted in the Central Valley on a parcel of land adjacent to the ICS tracks”].

¹¹⁷ See Air Quality Technical Report, p. 2-13.

Standard Response	Primary Objection(s)
GEN-19 – Economic Benefits Assume Completion of Statewide Project	<p>generalities. How can the public or decision makers tell whether these cost estimates are reasonable and accurate?</p> <p>This response fails to provide any citations or other substantiation for the assertion that so-called “international experience ” has shown that:</p> <p>HST systems are successfully built in sections over time, and need not be built immediately as a complete system in order to be successful. This international experience demonstrates that a section such as Fresno to Bakersfield can be a part of an HST system that is initially only partially in service and is eventually extended from the Bay Area to the Los Angeles Basin, as envisioned since 1996 with the establishment of the Authority.</p> <p>This vague assertion does not deal with the very real possibility that only part of that system will be built and then left to languish for years until the necessary funding is pieced together, likely in fits and starts, if it indeed is ultimately received. What are the impacts and costs associated with constructing only part of the larger system, one that offers only marginal public utility, if any, and one that has divided farms, communities, and habitat and has disrupted and interfered with much more? The FEIR/S, like the 2014 Business Plan fails to consider this outcome and the Authority does not appear to have a contingency plan to deal with it if it occurs.</p>
GEN-20 – Improper Piece-mealing	<p>The response presents another straw man argument. Few comments, if any asserted that the entire 800-mile system must be analyzed in a project-level EIR. Many have asserted that the 130-mile ICS, the structure the Authority will actually build using all available federal funding, should have been analyzed in a single project-level EIR. Analyzing a section that is 130 miles long would not be substantially more difficult than analyzing the 115-mile long Section, and the analysis would yield more informative results because it would reveal the impacts of what will actually be constructed.</p> <p>The response points out how the study area for impacts was extended into East Bakersfield, but it ignores the fact that impacts in south and north Fresno were considered in isolation of each other because they are addressed in two separate EIRs.</p> <p>If the actual phasing of initial construction were unimportant, then why would each EIR discuss the construction schedule?¹¹⁸ Why would each chapter of impact analysis separately consider construction-related impacts? These aspects of the EIR are an admission that the EIR was required to consider construction-period impacts, and the actual phasing of ICS construction is what is important, not the construction of a theoretical Fresno to Bakersfield section and a theoretical Merced to Fresno section.</p> <p>Considering the environmental impacts of various alignment alternatives for the</p>

¹¹⁸ See FEIR/S, pp. 2-113 – 2-114; see also M-F FEIR/S, pp. 2-100 – 2-102.

Standard Response	Primary Objection(s)
	<p>entire ICS in a single EIR would allow an appropriately broad discussion of the totality of regional impacts and consideration of alternatives that could function for the entire 130±mile corridor.</p> <p>Yet, the EIR and the technical appendices, in general, considered only the impacts of constructing the Section, in isolation.¹¹⁹ This analysis does not reflect what will actually occur, and does not inform the public or decisionmakers of the very real impacts that will result from constructing the ICS. The Authority has “chopped up” the ICS for purposes of environmental review, in contravention of CEQA and NEPA requirements.</p> <p>Despite preparing a Program EIR for the statewide Project, the Authority has violated CEQA’s prohibition against piece-mealing because environmental review for each Project segment fails to consider the impacts of the ICS. It also fails to consider the impact of neighboring segments as contributing to the overall impacts of the Project. In other words, by dividing the detailed project-level analysis into several segments, the Authority fails to analyze and mitigate the ICS project’s impacts as a whole. The statewide Program EIR/S does not suffice because its analysis was far too general to provide meaningful consideration of the Project’s myriad significant impacts and the Program EIR/S documents relied upon incorrect assumptions concerning the ROW width (50 feet) and sharing of freight railroad ROW, among other things.</p> <p>The Authority asserts that “It was within the Authority’s discretion to define the second-tier projects, and the only question is whether the Authority’s division of the second-tier projects is supported by substantial evidence.” This is not true. The Authority was obligated to describe the “whole of the project” and to analyze the impacts of the project in its entirety. Courts do not defer to an agency’s determination of the project’s scope.¹²⁰</p>
GEN-21 – Project Description Level of Detail	<p>This response opens with another straw man argument. Commenters did not urge the Authority to develop final project design, but sufficiently detailed project design.</p> <p>As stated above, the project description does not even satisfy the Authority’s own minimal 15% design guidelines much less the 35% design the Authority’s predecessor agency stated was necessary for environmental review.</p> <p>This response asserts, without providing any substantiation or cross-references that would assist the reader, that the design drawings in Volume III and the project footprint shown in Volume II depict all of the necessary project design information.</p>

¹¹⁹ See, e.g., FEIR/S, Appendix 3.6-B, Water Usage Analysis Technical Memorandum, pp. 3.6-B-10 – 3.6-B-10

¹²⁰ See, e.g., *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 82-83 [“If a final environmental impact report (EIR) does not ‘adequately apprise all interested parties of the true scope of the project for intelligent weighing of the environmental consequences of the project,’ informed decisionmaking cannot occur under CEQA and the final EIR is inadequate as a matter of law”], citations omitted.

Standard Response	Primary Objection(s)
	<p>We have reviewed the design drawings and cannot identify a number of project features that this response asserts are depicted. These undepicted features and impacted areas include, but are not limited to:</p> <ul style="list-style-type: none">• The electric infrastructure necessary to connect the Project to the electricity grid, via the traction power substations;¹²¹• The temporary construction staging areas and locations for batch plants;¹²²• The agricultural lands not within the project ROW that will nevertheless be permanently impacted as noneconomic remainder parcels;¹²³• The change in design for the bridge over the Kings River, which substantially increases the height of the bridge; and• The severed remainder parcels that were determined to be noneconomic. <p>As stated in prior comments, the Authority was required to provide this information and to analyze the impacts of these project features, pursuant to its own 15% design guidelines as well as under CEQA and NEPA.</p> <p>This standard response states that “Final construction, <u>and construction and staging areas</u>, would be located within the evaluated construction footprint.” The response to Comment BO032-27 states that</p> <p>“construction of the project on any of the alignment alternatives would temporarily use approximately 2,000 acres of land <u>outside of the permanent footprint</u> of project to provide for facilities for construction staging, lay down, and fabrication areas. Appendix 3.1-A shows all parcels within the project footprint.”¹²⁴</p> <p>These responses and the FEIR/S do not present a clear distinction between the “construction footprint,” the “permanent footprint,” and the “project footprint.”</p>

¹²¹ This missing information includes the areas that would be temporarily impacted by, among other things, reconductoring transmission lines, modifying existing substations, etc., as well as the areas that would be permanently impacted by, for example, installing new transmission lines. The Standard Response asserts that this information is included in Appendix 3.1-A, but this statement does not appear to be accurate.

¹²² FEIR/S Appendix 3.1-A shows areas that will be temporarily impacted because they will be within a “Construction area,” but it does not reveal, and the FEIR/S does not otherwise identify, those parcels that will be used as staging areas, batch plant locations, etc. The impacts will differ, depending on the type of construction activities that will occur on each of these vaguely identified sites. *See also* Air Quality Technical Report, p. 6-22 [“Because the locations of the concrete batch plants are unknown, fugitive dust emissions associated with the plants were estimated based on the total amount of concrete required and on emission factors....”].

¹²³ FEIR/S Appendix 3.1-A maps reveal many small remainder parcels that do not appear to have been counted towards the number of permanently impacted agricultural lands.

¹²⁴ *See* FEIR/S, p. 40-388.

Standard Response	Primary Objection(s)
	<p>Further, while the section on Land Use impacts briefly discussed (and dismissed) impacts caused by temporary construction activities on leased parcels located outside of the “project footprint,”¹²⁵ not all of the FEIR/S sections in the impact analysis chapter considered the impacts of construction staging, lay down, and fabrication areas. For example the section concerning impacts to Biological Resource does not mention these impacted areas outside of the project footprint.</p> <p>The level of detail concerning Section features provided in the RDEIR/S, and now supplemented with new information in the FEIR/S, remains insufficient for conducting the detailed impact analysis required under CEQA. The level of detailed environmental review is especially inadequate with respect to impacts to rural areas within the Section area.</p>
GEN-28 – Response to Comments Received After Close of Comment Period	<p>The response states that changes to the project’s design since circulation of the RDEIR/S do not “alter the nature or magnitude of impacts addressed in the [RDEIR/S].” We do not see how this conclusion is possible, and the response does not explain the basis for the conclusion or any substantiation. How can changing the design of the bridge over the Kings River, for example, not alter the nature or magnitude of the impacts?</p>
TR-01 – Construction Period Traffic Management Plan	<p>The RDEIR/S, and not the FEIR/S, assumes without any evidentiary basis that the Construction Transportation Plan (“CTP”) will be effective at reducing construction-period traffic impacts to less-than-significant (“LTS”) levels.</p> <p>Delegating responsibility for preparing the CTP to the design-build contractor is an improper delegation of duty.</p>
TR-02 – Road Closures	<p>This response dismisses the concern, expressed by many commenters, that temporary and permanent road closures would have significant disruptive effects on agricultural operations. According to this response, in lieu of more carefully analyzing the Section’s traffic impacts as suggested, the Authority will require a Traffic Management Plan (“TMP”) that would identify and respond to various traffic impacts. The time for impact analysis is now, before the Section is approved and the Project gains “irreversible momentum.”</p> <p>Road closures every two miles do not necessarily result in “no more than 1 mile out-of-direction travel for vehicles.” For some road networks in some rural areas, a road closure would result in much longer out-of-direction travel. CCHSRA members pointed out how road closures would result in much longer out-of-direction travel distances than the distances assumed in the RDEIR/S and FEIR/S.</p> <p>The FEIR/S improperly relied on existing levels of traffic on roads that will be closed to</p>

¹²⁵ See *id.* at p. 3.13-37.

Standard Response	Primary Objection(s)
	determine whether the closure will cause significant impacts. To be consistent with other aspects of the analysis, the analysis should have projected a future baseline, where regional traffic will increase due to population growth, to determine whether the road closures will result in significant impacts.
TR-03 – Station Parking	The FEIR/S should have conservatively concluded that station area parking demand would result in significant traffic, air quality, and noise impacts, and should have included a mitigation measure that would require the Authority to contribute funds towards meeting parking demands. Instead, the FEIR/S defers both the impact analysis and the mitigation to some future undefined date.
AQ-02 – General Environmental Concern	The FEIR/S does not analyze the construction-period air quality impacts for constructing the ICS. It incorrectly assumes that the construction phase will only consider construction activities within the Section footprint. The Air Quality Technical Report verifies this substantial analytical problem. This technical report does not even mention the ICS, and the discussion concerning the construction schedule indicates that only Section construction was considered in the air quality impact analysis. ¹²⁶ This information in the Air Quality Technical Report directly contradicts and undermines the statements in the Cumulative Impacts section (3.19) that the air quality impacts of constructing neighboring sections of the Project were considered.
AQ-03 – Increased Emissions Due to Re-Routed Travel of Farm Vehicles	Out-of-direction travel may be much longer than 1 mile in some areas, especially for large farm equipment. Because the so-called analysis in this response is not supported by substantial evidence, the conclusion that impacts would be “negligible” is baseless.
AQ-04 – Localized Air Emission Increase	This response fails to address the short-term localized air quality impacts (direct, indirect, and cumulative) caused by ICS construction.
PU&E-01 – Analysis of Traction Power Stations and Project Driven Transmission Line Upgrades	<p>Pursuant to the Authority’s own 15% design guidelines, the electric infrastructure improvements required for the Project is part of the “minimum” information necessary to conduct environmental review.¹²⁷ The FEIR/S does not satisfy the Authority’s own minimum informational requirements. This responses states that the minimum information “is not currently known,” but the Authority is not excused from its responsibility to investigate and disclose all it reasonable can regarding the Project and the ICS.</p> <p>Upgrades to existing grid infrastructure and new electric infrastructure are reasonably foreseeable consequences of the Project, the IOS, and of the ICS. Under both the</p>

¹²⁶ See FEIR/S, Air Quality Technical Report, March 2014, pp. 2-19 – 2-21, 6-18 – 6-22, 7-41 – 7-45; *see also id.*, Appendix A, pp. 13-19 of .pdf file.

¹²⁷ See Coalition’s Letter to Corps re PP1 404 Permit, pp. 22-23; *see also id.*, Exh. O, TM 0.1, 15% Design Scope Guidelines. This and all other exhibits to the Coalition’s Letter to Corps re PP1 404 Permit are hereby incorporated by reference.

Standard Response	Primary Objection(s)
PU&E-02 – Electricity Supply Impacts	<p><i>Laurel Heights I</i> the <i>Del Mar Terrace</i> tests for piecemealing, the Authority and FRA were required to investigate the electric infrastructure required to supply the HST with electricity and to analyze the impacts of constructing and operating that infrastructure.</p> <p>This response identifies the peak electricity demand of the Section, but fails to consider the peak demand of the ICS (once it's electrified, if ever), the IOS, and the Project. The response once again illustrates how the piecemealing problem pervades the analysis.</p>
BIO-01 – Wildlife Habitat and Wildlife Movement Corridors	<p>The project's "limited time-frame" does not excuse the Authority and FRA from shirking their duties to analyze the existing baseline for wildlife movement corridors, assess the ICS's impacts, and develop appropriate design changes and mitigation measures to avoid and minimize those impacts.</p> <p>The resources agencies have consistently expressed concerns about the Project's potential to block wildlife movement. CDFW urged the Authority to consult with the agencies to ensure the impact analysis was accurate and that crossing structures were carefully designed. It's not clear from the response or from the FEIR/S whether this consultation occurred.</p>
BIO-02 – Mitigation Measures	<p>As explained above, not all mitigation measures proposed for biological resource impacts include the required performance standards.</p>
BIO-03 – Biological Resource and Wetland Surveys	<p>The response acknowledges that surveys for biological resources, wetlands and cultural resources were not performed along most of the Section alternative routes, but defends this approach as allowable under both NEPA and CEQA. This is incorrect. As stated in numerous public comments, CEQA requires the Authority to establishing an accurate baseline against which a project's impacts may be measured.</p> <p>Neither this response nor the FEIR/S reveal the percentage of impacted parcels that were surveyed for biological resources and wetlands. Instead, the documents vaguely describe how surveys were conducted where access was granted. This does not inform the reader of the extent to which the impacted areas were surveyed for biological resources and wetlands. The FEIR/S should have included a map depicting the parcels surveyed, and those not surveyed and the relative functions and values of the surveyed vs. non-surveyed parcels.</p> <p>The response also does not explain why the consultants did not follow established protocols for conducting surveys. Authority documents state that protocols were not followed because the deadlines for ARRA funding.¹²⁸ That the Authority is in a hurry to capitalize on federal funding grants does not excuse short cuts in the</p>

¹²⁸ See Coalition's Letter to Corps re PP1 404 Permit, pp. 25-26 [citing Survey Plan Presentation, dated Nov. 5, 2009, Central Valley Biological Resources & Wetlands Survey Plan - Nov 2010, Memo re Permitting Meeting between Agencies' Staff, dated April 30, 2011].

Standard Response	Primary Objection(s)
	<p>environmental impact analysis. The response does not explain the basis for the resource agencies' apparent decision to excuse this massive project from survey efforts that are ordinarily required.</p> <p>The assumption of presence is not conservative as the Authority has claimed because the Authority intends to conduct post-approval surveys with the specific goal of reducing the amount of mitigation required.¹²⁹ These post-approval surveys will be conducted without any public disclosure or involvement. This behind-the-scenes process defeats the primary purpose of CEQA and NEPA, public disclosure and participation and responsible and accountable decision-making.</p>
S&S-05 – Security Concerns/Emergency Response	The discussion concerning security concerns replicates the conclusory dismissal of the potential threat of terrorist attacks. The Clients have submitted substantial evidence that undermines the unsupported statements in this response and in the FEIR/S regarding safety and security concerns.
SO-01 – Acquisitions, Displacements, and Relocations	The statement that “relocation could still represent an inconvenience or hardship to some property owners” understates the widespread disruption and interference the ICS will cause. Commenters have repeatedly warned the Authority that replacement properties may not be as readily available as the Authority apparently assumes.
SO-02 – HST Project Lower Property Values	This response emphasizes the increased property values that may occur in areas near stations and downplays property value decreases that will occur in areas impacted by the HST alignment. These decreased property values could contribute to the problem of urban decay, an environmental impact that the FEIR/S failed to adequately address.
SO-03 – Business Impacts	As with Standard Response SO-1, this response assumes, with little to no evidentiary support, that most businesses will seamlessly relocate and that their employees will all be retained through the process.
SO-07 – EJ/Outreach	<p>The response points out measures that apply to all impacted communities, not just those that are primarily minority and low income. The FEIR/S does not sufficiently address the disproportionate impacts on EJ communities.</p> <p>A recently released map of pollution hot spots in the state identifies Fresno as having the highest levels of pollution.¹³⁰ It's ironic that the first section of the Project is going to be constructed in one of the epicenters of California's pollution. While the Authority has consistently advertised the long-term benefits of the Project, the construction-period impacts for the ICS will exacerbate already terrible air and water quality problems in this area. And there is currently no guarantee that the long-term</p>

¹²⁹ See Exh. D: E-mail re Post-Approval Surveys, dated April 3, 2012 [re conducting surveys post-approval in order to “potentially avoid an over mitigation of the impacts resulting from our current “assume presence stance....”].

¹³⁰ See Exh. E: Comments Concerning Responses to Comments from Ybarra Company Public Affairs, Attachment A, L.A. Times article: Fresno Ranks No. 1 on CA Pollution List.

Standard Response	Primary Objection(s)
	benefits will be realized due to the Project's substantial lack of funding.
LU-01 – Regional Growth/Land Use – Urban Sprawl	As with the FEIR/S, this response does not present evidence that sprawl will not be induced by the Project. The Authority and FRA should commit to further mitigation measures that would better protect against sprawl and its undesirable effects on agricultural lands. ¹³¹
LU-02 – Land Use – Conversion/Consistency	<p>The farmland consolidation program described in this response may not be fully effective, in that some non-economic remnant parcels may not be sold to neighboring land owners for continued agricultural use. Such non-consolidated parcels should be counted towards the total acreage of directly impacted agricultural lands and this loss should be mitigated.</p> <p>The discussion of potential conversion of agricultural lands in the vicinity of the Kings/Tulare Regional Station-East Alternative reveals a double-standard employed by the Authority. Such station-area induced growth was used to justify elimination of the I-5 corridor alternative, but it has not deterred the Authority from considering this alternative station location.</p>
AG-01 – Farmland Impacts – General	The response does not address the lack of evidentiary support or substantiation for the number of farmland acres the FEIR/S reports as directly impacted by the Section.
AG-02 – Severance	<p>The response's analysis concerning the impacts to agriculture that would be caused by severing currently intact parcels is not supported by substantial evidence. Further, the loss of productivity and efficiency could lead to physical effects on the environment that must be analyzed – this impact is not merely an economic or social effect as the response suggests.</p> <p>While the response promises more careful parcel-specific analysis during the appraisal process, the careful analysis must occur now, before the Section and the Project as a whole gain irreversible momentum.</p> <p>Ag-MM#2 is no longer being proposed – instead, consolidation of severed parcels is now proposed as part of project design. A major problem with this approach is that it provides no assurance that consolidation of severed parcels will be implemented – if this planned effort had remained an agricultural impact mitigation measure, the Authority would have to implement, monitor and report its implementation.</p> <p>As now proposed, the description of the efforts that will be taken as part of Section design lacks any enforceable performance standards, so the Authority can completely fail in its efforts to make the severed remnant parcels productive, exacerbating already significant impacts to agriculture in the region. The Clients strongly objects to this change to important mitigation and urge the Authority to restore Ag- MM#2 as an</p>

¹³¹ See Exh. C: Letter from EPA to FRA and Authority re M-F Administrative Draft FEIR/S, dated May 1, 2012, p. 2.

Standard Response	Primary Objection(s)
AG-03 – Severance – Non-Economic Remnants	<p>enforceable mitigation measure for the ICS.</p> <p>Not all non-economic remainder parcels are identified in Appendix 3.1-A as part of the Section footprint. There are many slivers of parcels adjacent to the depicted project footprint that could not possibly have any economic value to farmers. This is why commenters first asked for substantiation for the calculation of direct impacts to agricultural lands. The response does not provide the required substantiation.</p> <p>The response states that “</p> <p>Analysts (land use planners, real estate specialists, and GIS operators) conducted a review using the construction footprint and parcel boundaries to identify remainders that did not appear to have any potential for continued agriculture use either individually or in combination with adjacent land.</p> <p>There are several problems with this statement:</p> <ul style="list-style-type: none">• Nowhere in the response or in the FEIR/S are these analysts and their qualifications for this analysis identified.¹³² These qualifications are critically important, given the nature of the determination they are making. The public must be provided with a means to confirm the analysts’ qualifications.• The FEIR/S and the explanation in this response do not describe the process through which the determinations of viability were made. Did multiple analysts need to concur with the determination made for each remnant parcel?• The FEIR/S and the explanation in this response do not explain the weight given to each of the factors considered by the analysts.• By stating the analysts only counted as directly impacted those remnant parcels that would not have “any” potential for continued agriculture, the analysts did not include within their directly impacted category those lands where potential for continued agriculture would substantially reduced.• By including the last clause “or in combination with adjacent land,” the response suggests that analysts assumed that the Farmland Consolidation Program would be successful and that any remnant parcel that could possibly be consolidated with a neighboring parcel would be and would therefore not be directly impacted by the Section. But many remnant parcels will not be consolidated with neighboring parcels. For example, remnant parcels that lose access to their water supply and irrigation systems may not be attractive to

¹³² The FEIR/S does not include any technical reports or appendix supporting the Agricultural Lands impact analysis. This is a conspicuous void, given the plethora of technical reports and appendices supporting the other areas of impact analysis.

Standard Response	Primary Objection(s)
	<p>neighboring landowners for acquisition.</p> <p>All of the above problems combine to violate the requirements of CEQA.¹³³</p> <p>To provide the level of evidentiary support for the analysis required by CEQA and NEPA, the FEIR/S should have, among other things, disclosed and depicted the remnant parcels that were subject to this evaluation and determination, the percentage of those parcels that were counted towards the acreage of directly impact lands and those that were not, and the reasons for each determination. This Section (and the ICS as a whole) will impact thousands of acres of farmland, and will interfere with thousands more. The severity of this type of impact in this region warrants a transparent, supported, testable analysis. The FEIR/S does not provide this.</p>
AG-06 – Confined Animal Facilities	<p>This response suffers from a problem that pervades the analysis: the emphasis on a large denominator as a means to minimize the impact. Just because there are a lot of dairies in the four counties impacted by the Section does not mean the loss of a “few dairies” is not significant. Similarly, just because there are hundreds of thousands of acres of important farmland in the region does not mean the loss of thousands of those acres in agricultural use is not significant. The FEIR/S must face up to reality, with a large project such as that proposed here, there will be large impacts that must be avoided or mitigated.</p>
CUL-01 – Documentation of Existing/Additional Built Env. Resources	<p>Again, the FEIR/S should have provided a description of the parcels that were accessed for surveys and those that were not. A map depicting the surveyed areas should have also been provided in order to inform the public. The analysis of impacts to cultural and historical resources improperly defers the investigation of resources that will be impacted.</p>

¹³³ Pub. Res. Code, § 21061 [“information or data [supporting an EIR’s analysis] shall be briefly described, [] its relationship to the environmental impact report shall be indicated, and [] the source thereof shall be reasonably available for inspection at a public place or public building]; *see also* CEQA Guidelines, §§ 15147 [“The information contained in an EIR shall include summarized technical data, maps, plot plans, diagrams, and similar relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public”] 15148 [“The EIR shall cite all documents used in its preparation including, where possible, the page and section number of any technical reports which were used as the basis for any statements in the EIR”]; *see also San Franciscans for Reasonable Growth v. City and County of San Francisco* (1987) 193 Cal.App.3d 1544, 1549 [“Guideline 15147 requires the EIR to include underlying technical detail so that the conclusions of the report can be evaluated by its reading audience.... The message of this regulatory scheme is clear: an EIR in this state must be written and presented in such a way that its message can be understood by governmental decisionmakers and members of the public who have reason to be concerned with the impacts which the document studies”].

2. Objections to the Authority's Responses to Specific Comments

Table 2 summarizes some of our primary objections to responses to CCHSRA's comments.

Table 2 – Inadequate Responses to CCHSRA Comments

Response	Primary Objection(s)
BO023-8	<p>This response repeats the inaccurate assertion that the I-5 corridor alignment would have lower ridership than a SR-99 corridor alignment. The studies completed in the mid-1990s concluded that the I-5 corridor alignment would have the highest ridership than any of the alternative alignments considered.</p> <p>The project objectives listed in the FEIR/S are unreasonably narrow, resulting in a constrained range of project alternatives. Including an I-5 corridor alternative in the EIR's analysis would have provided a true "range" of alternatives. Instead, the EIR provides relatively insubstantial variations on the BNSF Alternative.</p> <p>Many commenters have offered valid reasons why the I-5 corridor alternative should have been considered during project-level environmental review. This alternative was dismissed prematurely, with scant supporting evidence. The response points to the capital costs associated with constructing spur lines, but it does not consider the decreased capital costs of constructing the main line along I-5. Constructing the ICS through the Central Valley's major cities, as currently planned, will have much higher capital costs due to the need to relocate extensive transportation and utility infrastructure, among other things.¹³⁴ The response ignores this trade-off in capital costs.</p>
BO025-5	<p>The response reveals the FEIR/S's failure to address impacts on organic farm operations. The use of pesticides and herbicides within the HST ROW could indeed contaminate organic farms, potentially resulting in the loss of organic certification. To prevent this, the mitigation measures calling for the use of pesticides and herbicides must be modified to prohibit the use of these chemicals in proximity to organic farm operations. Similarly, extra dust control measures should be implemented during construction in order to avoid impacts to organic farming operations (compliance with SJVAPCD dust control measures may not be sufficient to protect these operations from adverse impacts).</p>
BO025-6	<p>The response includes the conclusory and unsupported statement that "impacts [from application of herbicides] outside the [HST ROW] are not expected." This response dismisses a legitimate concern without analysis or support, in blatant</p>

¹³⁴ See FEIR/S, pp. 40-705 – 40-760 [Task Orders for Master Agreements with various local agencies, public utilities and private companies, and summary of Task Order costs]. The most current versions of the Master Agreements and Task Orders are hereby incorporated by reference, and we request that they be made part of the administrative record for the Section.

Response	Primary Objection(s)
	violation of CEQA's requirements.
BO025-10	The comment and the attached map depicting the route that farm workers would need to take to access parcels on the opposite side of the Section alignment directly undermine the Authority's repeated assertion that overpasses located approximately every two miles would result in no more than one mile in out-of-direction travel. ¹³⁵ This response refers only to Standard Response AG-2, but that standard response does not address the increased out-of-direction travel required for this landowner, or for any other landowner for that matter. ¹³⁶ It also does not address the private easements that would be required to access the remainder parcels on the other side of the alignment. These are difficult issues that many landowners face, yet the FEIR/S dismisses them without the required analysis.
BO025-11	This response refers only to Standard Response AQ-03, but that standard response does not address the VMTs associated with increased out-of-direction travel required for this landowner, or for any other landowner for that matter. ¹³⁷ Instead, the standard response dismisses the concern about increased VMT with unsupported conclusory statements and no analysis. The hot spot analysis conducted for CO and PM do not suffice for this analysis because they do not address the associated increases in regional VMTs caused by parcel severance and road closures.
BO025-12	This response repeats general principles concerning the adequacy of an EIR. These statements are not helpful to a landowner facing significant impacts from this Project. CEQA does indeed require a good faith effort at full disclosure, and unfortunately, the Authority has not made this effort.
BO025-15	The response and the underlying analysis in the FEIR/S rely on the assumption that disruption to dairy operations will be remedied fairly quickly and that the economic impacts will be short-term. This assumption is unsupported and incorrect. The response also points out the establishment of a "permit bureau" and the assistance of the Authority's ROW agencies as measures taken to reduce impacts. It concludes that "The agents may not be able to resolve all issues, and will offer compensation to landowners who demonstrate a hardship from loss of

¹³⁵ See FEIR/S, pp. 40-140, 40-144.

¹³⁶ See *id.* at p. 35-147 ["most of the new public road overcrossings would generally occur approximately every 2 miles to provide continued mobility for local residents and farm operations ... Consequently, out-of-direction travel would be limited to approximately 1 mile in nearly all locations in the project area. Longer intervals between road crossings would generally occur in areas with no current crossings (i.e., no change from existing conditions)".]

¹³⁷ See *id.* at p. 35-85.

Response	Primary Objection(s)
	<p>facilities.” This statement is problematic for at least a couple of reasons. First, it demonstrates an assumption that the disruption the Project will cause can be remedied by throwing money at the problem. Second, it places the burden on the landowner to “demonstrate a hardship from the loss of facilities.”</p> <p>Demonstrating such a hardship requires time and money (adding an expense to an already bad situation), will the Authority compensate landowners for the expenses they incur in demonstrating such hardships? If it does not, impacted landowners will not be made completely whole.</p>
BO025-16	<p>The response assumes, without supporting evidence, that the loss of land at dairies will cause only short term effects. This response again uses a large denominator (total revenues from agricultural business operations in the four-county area) to minimize the effects the ICS will have on impacted dairies.</p>
BO025-18	<p>Left unanswered in this response, the FEIR/S and in the 2014 Business Plan: does the Authority have enough funding to purchase all ROW parcels, construct the ICS, relocated existing infrastructure and build new infrastructure, mitigate all impacts, and compensate impacted landowners for temporary and permanent losses of income? The 2014 Business Plan’s cost estimates do not include line items for mitigation and compensating landowners.</p>
BO025-19	<p>There is no “Master Response #73.”</p>
BO025-20	<p>The response does not address the issue of increased VMT as a result of the Project ROW bisecting an existing feed/dairy operation.</p>
BO025-21	<p>The permitting costs and relocation costs cited in this comment were intended to illustrate the tremendous financial burden this Project will cause to dairies and other agricultural operations. The response assumes that all such costs will be fairly compensated during the acquisition process. Due to the tremendous shortfall in Project funding, can landowners really expect to receive full compensation for their losses or will it be more likely that the Authority’s agents will be under pressure to minimize compensation to conserve limited funding?</p>
BO025-22	<p>See our comments regarding response BO025-11, above.</p>
BO025-23	<p>The response and the reference standard responses do not address the main issue presented in the comment: the increased wear and tear on public roads that will be caused by farm equipment that, absent the Project, would be moved to fields on private roads. Will the Authority be required to compensate cities and counties for this wear and tear on public roads?</p>
BO025-25	<p>See our comments regarding response BO025-11, above.</p>
BO025-26	<p>The information concerning impacts to Lakeside Cemetery and Dairy (and the other agricultural operations described in this letter) was presented to illustrate</p>

Response	Primary Objection(s)
	some of the deficiencies in the impact analysis. The FEIR/S does not present an analysis that would allow the decision makers to make a decision “which intelligently takes account of environmental consequences.” The FEIR/S analysis of impacts to agricultural lands (and socioeconomic impacts, etc.) is full of generalities and blanket assumptions, rather than a robust discussion of the actual impacts that will occur on the ground. The plan to compensate landowners for their losses is an excuse for this incomplete analysis.
BO025-29	See our comments regarding response BO025-26, above.
BO025-30	See our comments regarding response BO025-26, above.
BO025-31	See our comments regarding response BO025-26, above.
BO025-32	See our comments regarding response BO025-26, above.
BO026-1 – 7	The technical reports supporting the RDEIR/S should have been made available to the public at reviewing locations and included in the CD-ROM disks sent to various requesting parties. By failing to provide these materials to the public in a timely manner, the Authority and FRA failed to comply with NEPA’s requirements and undermined the public’s ability to meaningfully participate in the environmental review process, in contravention of CEQA requirements.
BO027-1 – 9	The air quality and GHG reduction benefits of the Project are overstated, as are the ridership estimates. The analysis of air quality impacts and mitigation for those impacts are inadequate. ¹³⁸
BO029-2	See our comments regarding Standard Responses GEN-01 and GEN-21, above.
BO029-3	<p>See our comments regarding Standard Responses GEN-01 and GEN-21, above.</p> <p>As stated above, the RDEIR/S and FEIR/S do not contain all of the information required pursuant to the Authority’s own 15% design guidelines.</p> <p>According to the Authority’s predecessor agency, at least a 35% level of design is necessary to conduct environmental review. The Memorandum of Understanding between the Authority, FRA, U.S. Army Corps of Engineers (“Corps”), and U.S. Environmental Protection Agency, states that a 60% level of design is necessary for the environmental analysis to be sufficient for issuing a Clean Water Act section 404 Permit.</p> <p>Even the FEIR/S does not meet the Corps’s minimum design-level requirement, as memorialized in the MOU, or the 35% design-level the Authority’s predecessor agency stated was necessary for environmental review.¹³⁹</p>

¹³⁸ See Exh. F: Comments Concerning Responses to Comments from Blue Sky Consulting Group.

¹³⁹ See FEIR/S, p. 40-1003 [“The Final EIR/EIS represents a 15% to 30% level of design”].

Response	Primary Objection(s)
BO029-4	<p>See our comments regarding Standard Responses GEN-01 and GEN-21, above.</p> <p>The response asserts that the 15% design identified all necessary project design information, including the location of temporary construction staging areas. This assertion, however, is inconsistent with the Alternatives section of the FEIR/S and with the maps depicting project features.¹⁴⁰</p> <p>The response relies on <i>Dry Creek Citizens Coalition v. County of Tulare</i> (1999) 70 Cal.App.4th 20, 28 as support for the proposition that the 15% design here was sufficient for impact analysis. However, <i>Dry Creek Citizens</i> is easily distinguishable because the project design features at issue there, water diversion structures, were described in some detail in the EIR and were even “depicted in the contour map of the mining plan.” Here, in contrast, several important project features, including temporary construction staging areas, electricity infrastructure, and grading details are left undescribed and not depicted.</p>
BO029-7	<p>The “rule of reason” requires the Authority to define as the “project” for impact analysis the section of the HST Project that it actually intends to build and operate. Since late 2010, the Authority has known that this section is the ICS. This is the section that the Authority asserted in its ARRA application materials as having “independent utility” because of its potential to be used by Amtrak during the interim period until it receives sufficient funding for the IOS. If the Authority constructs the ICS, it may take years before it receives the funding necessary to construct anything more.</p> <p>The Authority’s intention to construct the ICS has not changed since that late 2010 (9 months prior to simultaneous release of the two DEIR/S for the neighboring station-to-station “sections”). Thus, the Authority could have completed a single project-level EIR for the 130-mile ICS and that EIR would have addressed the impacts of the project that the Authority actually intends to construct and operate in the Central Valley. By dividing the analysis for the ICS into two EIRs, the Authority has piecemealed the review, in violation of both NEPA and CEQA. The divided analysis does not provide the decision makers and the public the necessary information concerning the impacts of the ICS.</p>
BO029-11	<p>The response does not address all of the inconsistencies between the Section’s design and the assumed design of the statewide HST Project, as described and analyzed in the PEIR/S documents. The response does not address the Section’s inconsistency with the 50-foot-wide ROW assumed in the PEIR/S and the assumption that the Project could be built <u>within</u> existing freight railroad ROW.</p>

¹⁴⁰ See FEIR/S, 2-116 [stating that construction staging areas will be identified during final design]. We searched the maps in Vol. III of the FEIR/S for the word “staging” and did not find a single reference to or depiction of staging areas.

Response	Primary Objection(s)
	<p>These inconsistencies prevent the Authority and FRA from relying on the impact analysis in the PEIR/S documents.</p> <p>The Cumulative Impacts section states that it considered the neighboring Project sections, where appropriate, but these statements are not supported by any substantial evidence. Except for the Air Quality Technical Report and the Biological Resources Technical Report, all technical appendices are devoid of any evidence that that analysts actually considered neighboring sections when analyzing this Section's cumulative impacts.</p>
BO029-12	<p>The response repeats the promises made in the RDEIR/S concerning limiting sprawl and other growth inducing effects. Without stronger "commitments" from the Authority to do what it can to limit the sprawl that the Project would likely induce, the Authority cannot credibly claim that the Project would concentrate growth. Consider adopting stronger measures to control and concentrate growth around Project stations, consistent with EPA recommendations.¹⁴¹</p>
BO029-13	<p>This response is deficient for reasons explained elsewhere in this letter.</p> <p>Further, the explanation regarding the requirement for at least 60% design for a preliminary determination by the Corps does not address language in the MOU that suggests the 60% design level must be reached before issuance of the FEIR/S. This language indicates that the Corps and the EPA require an EIS document based on a higher level of design.</p>
BO029-15	<p>The response to this comment does not substantiate the claim that the Authority has adequate funding for mitigation. The Authority has not addressed concerns regarding the costs associated with relocating infrastructure and constructing new infrastructure, as identified in the Master Agreement Task Orders. It has also not factored in the cost of relocated oil and gas wells.</p> <p>The 2014 Business Plan cost estimates for the ICS and IOS do not include line items for relocating infrastructure, new infrastructure, and mitigation, so this document does not provide the required substantiation for the claim that the Authority has adequate funding for everything required for constructing the ICS and mitigating its impacts.</p>
BO029-18	<p>The response does not address the comment. The comment raised safety concerns related to the stability of HST track structures on loose soils. The referenced Standard Response, N&V-03 does not address this issue, and neither does the remainder of this response.</p>

¹⁴¹ See, e.g., Exh. C: Letter from EPA to Authority and FRA re Admin Draft FEIR/S for Merced to Fresno, dated May 1, 2012, Attached Detailed Comments, pp. 2-4.

Response	Primary Objection(s)
BO030-22	See our comments regarding Standard Response TR-02, above.
BO030-23 - 27	<p>These responses do not address a critical question posed in the corresponding comments: did the analysis of traffic impacts include the road closures?</p> <p>The effect of road closures was analyzed using lower current traffic levels, whereas the effects of the Section generally used higher future traffic baseline levels. These inconsistent approaches tend to downplay the adverse effects of both road closures and Project-induced traffic. The analysis should have used a future baseline that models traffic levels based on the larger regional population. With a larger population, roads that are currently used by less than 500 vehicles per day could be used by many more vehicles, closing roads would funnel more vehicles onto the HST crossings, potentially causes traffic impacts.</p>
BO030-39	<p>With respect to the secondary impacts caused by roadway widening mitigation measures, the response states “[n]one of these mitigation measures will result in secondary significant impacts.” This conclusory statement simply repeats the unsupported statement in the RDEIR/S and FEIR/S.¹⁴² The Transportation Technical Report does not address the secondary impacts caused by mitigation measures.</p> <p>As the response goes on to acknowledge, adding lanes to existing roadways (which roadways are already heavily used) and other physical modifications to roadways will cause secondary traffic impacts, air quality impacts, and noise impacts that the EIR was required to analyze and mitigate. There is no analysis that estimates, either quantitatively or even qualitatively, the severity of these impacts. The Authority assumes, without evidentiary support or substantiation, that the Construction Management Plan will reduce all of these secondary effects to LTS levels. This bare conclusion is inadequate under both CEQA and NEPA.</p>
BO030-40	<p>This response recites the general rule concerning acceptable deferral of mitigation:</p> <p>“Under CEQA, where it is not possible to formulate the precise detail of a mitigation measure at the time a draft EIR is prepared, an agency may defer exact formulation of the mitigation measure by specifying specific performance standard(s) that will be achieved through the implementation of the mitigation measure and identifies means by which the performance standard could be achieved.”¹⁴³</p>

¹⁴² See RDEIR/S, p. 3.2-128; *see also* FEIR/S, p. 3.2-124.

¹⁴³ See FEIR/S, p. 40-295, citing CEQA Guidelines, § 15126.4(a)(1)(B); *see also* *Save Cuyama Valley v. County of Santa Barbara* (2013) 213 Cal.App.4th 1059, 1070; Pub. Resources Code, § 21100(b)(3).

Response	Primary Objection(s)
	<p>This simplified expression of the rule is fine. The problem here, however, is that the performance standard for TR MM#1 is impermissibly vague. What does it mean to maintain “the viability of the property use as it was used prior to the initiation of HST project construction”? Would alternative access that increases the amount of time to reach the subject property from the nearest public road by 10 or 20% maintain the viability of the property use? Would doubling the amount of time to access the property maintain the viability of the property use? The FEIR/S does not provide any clarity on these issues.</p> <p>A better performance standard would be: “Alternative access shall not increase the time required to access property impacted by a permanent road closure by more than __%” (where the percentage of increase is based upon substantial evidence concerning the amount of time that would not significantly impact the use of the property).</p>
BO030-42	There are no “responses to comments 2091 and 2093.” Thus, this response fails to address the corresponding comment.
BO030-43 – 143	Inadequacies in these responses are addressed elsewhere in this letter.
BO030-144	<p>The Authority and FRA should consider additional mitigation measures to reduce direct, indirect, and cumulative impacts to agricultural lands. One potentially feasible measure involves enhancing lands to make them more productive for agriculture. This could involve, among other things: remediating salt and selenium contaminated soils, making water available to property that currently lacks a sufficient water supply, and drilling new groundwater wells or making existing wells deeper. The Authority and FRA must consider these proposed mitigation measures before it can conclude that impacts to agricultural lands cannot be further mitigated.</p>
BO031-1	<p>As commenters have repeatedly noted, the I-5 corridor alternative was prematurely eliminated after limited analysis. The 2005 PEIR/S relied solely upon the studies conducted in the mid-1990s to eliminate the I-5 corridor alternative from further consideration. This has resulted in project-level EIR/S documents that do not include a true “range” of reasonable alternatives. We request that the Authority include the “Phase 1, 2, and 3 analysis and resulting documents” in the administrative record for the Section.</p>

Table 3, below, summarizes some of our primary objections to responses to other specific comments.

Table 3 – Inadequate Responses to Other Comments

Response	Primary Objection(s)
L005-13 – Secondary Effects Caused by Mitigation Measures	<p>As with the RDEIR/S, this response provides only a conclusory statement concerning the impacts that would be caused by mitigation measures. Such unsupported statements responding to significant environmental concerns are inadequate under CEQA.</p> <p>With respect to the failure to analyze secondary impacts from traffic mitigation measures, see our comments regarding response BO025-39, above.</p> <p>The discussion of secondary impacts caused by sound walls claims that the impacts of construction and the existence of the sound walls were analyzed in the EIR, but the response does not provide any roadmap that would allow the reader to verify the claim.¹⁴⁴ Upon inspection, it is obvious that many of the impacts that would be caused by sound walls were in fact <u>not</u> analyzed and mitigated, as required. For example:</p> <ul style="list-style-type: none"> • The cursory discussion of secondary impacts in the Noise section acknowledges the possibility of secondary visual and aesthetic effects from the sound walls (but no other types of secondary effects). However, it does not analyze these effects on a site-specific basis, claiming uncertainty in the sound wall locations, it also assumes, without evidentiary support, that such unanalyzed secondary impacts will be mitigated.¹⁴⁵ • There is absolutely no mention of sound walls in the Air Quality and Climate Change section or in the Air Quality Technical Report, even though constructing sound walls that together will be more than 32 miles long will result in additional air quality impacts. <p>Thus, the conclusory statement in the response is <u>false</u>. The FEIR/S did <u>not</u> analyze all the secondary impacts of constructing sound walls.</p> <p>Further, the number and length of sound walls increased between the FEIR/S and the RDEIR/S, thereby increasing the secondary impacts of constructing these structures, without any mitigation. For example, the RDEIR/S indicates that 139,233 feet of sound barriers could be constructed to mitigate severe noise effects caused by the BNSF Alternative.¹⁴⁶ In contrast, the FEIR/S stated “A total of 12 sound barriers would be installed, with a combined length of</p>

¹⁴⁴ See FEIR/S, p. 39-473 [stating, without support or citation: “The analysis of sound wall construction impacts is encompassed by the construction impact analysis for the HST system”].

¹⁴⁵ See FEIR/S, pp. 3.4-76 – 3.4-77. The EIR should have at least analyzed the secondary visual and aesthetic impacts at the locations where sound walls were proposed.

¹⁴⁶ See RDEIR/S, pp. 3.4-56 – 3.4-57 [Table 3.4-29].

Response	Primary Objection(s)
	<p>approximately 167,208 feet and maximum height of 14 feet, for the BNSF Alternative.”¹⁴⁷ That is 27,975 additional feet (or more than five miles) in sound barriers proposed in the FEIR/S. One proposed sound barrier in Bakersfield went from 8,453 feet long in the RDEIR/S to 51,390 feet long in the FEIS/R.¹⁴⁸ The EIR was required to analyze and mitigate the impacts associated with these additional sound barriers, but it did not. Because the impacts are more severe, and are not mitigated, recirculation was triggered on this basis alone.</p> <p>Further, the FEIR/S reveals increased severe noise impacts in several locations, but does not propose sound barriers to address these increased impacts on the basis that they are economically infeasible.¹⁴⁹ This too is an independent trigger for recirculation.</p> <p>The response does not address the secondary impacts that will be caused by habitat restoration activities. The response refers to Standard Response BIO-02, and while this standard response mentions “conservation projects to create, restore, or enhance habitats” it does not address the secondary impacts that would result from these activities. Therefore, the response does not satisfy the requirements of CEQA Guidelines § 15088.</p>
L005-19 – Inadequate Notice	<p>The response asserts that “Public notification exceeded the basic requirements of both CEQA and NEPA, which do not mandate direct notice to individual property owners.” This is not correct.</p>
L005-85 – Potential to Spread Valley Fever	<p>This response concludes without any evidentiary support or factually supported analysis that the risk of spreading Valley Fever spores during either Section construction or operation is less than significant.</p> <p>However, the SJVAPCD acknowledges that Valley Fever is a serious, life-threatening disease caused by airborne spores of <i>C. immitis</i>, a soil-dwelling fungus found in the southwestern United States. The San Joaquin Valley experiences one of the highest regional rates of the disease, especially in the southern and western portions of the Valley. Eighty percent of the Valley Fever cases in California were found in Fresno, Kern, Kings, San Joaquin, San Luis Obispo, and Tulare Counties.¹⁵⁰</p>

¹⁴⁷ FEIR/S, p. 3.4-58; *see also id.* at pp. 3.4-58 – 3.4-73 [discussion re severe noise effects and potential mitigation via sound walls and “noise barriers”].

¹⁴⁸ Compare RDEIR, pp. 3.4-67 with FEIR/S 3.4-72.

¹⁴⁹ Compare RDEIR, pp. 3.4-65 – 3.4-69 with FEIR/S 3.4-70 – 3.4-73.

¹⁵⁰ Memorandum from Seyed Sadredin, Executive Director, SJVAPCD and David Lighthall, Project Coordinator, to SJVAPCD Governing Bd. (May 2, 2012), p. 2, available at: http://www.valleyair.org/Board_meetings/GB/agenda_minutes/Agenda/2012/May/StudySession/FinalItem9-BAM_ValleyFever_May_2_2012.pdf.

Response	Primary Objection(s)
	<p>Due to the serious nature of this illness,¹⁵¹ the massive amount of soil that must be moved to create the earthen berms,¹⁵² overpass embankments, and other fill needs, the likely occurrence of <i>C. immitis</i> spores in that soil, and the already at-risk population, the Authority should take this issue much more seriously. The Project may indeed cause significant impacts to worker and public health. CEQA requires the Authority to evaluate this impact and propose all feasible mitigation measures necessary to reduce this impact to a LTS level. Instead, it dismisses the concern about this potentially significant impact in a response to comments, without having conducted <u>any</u> analysis into the risk that Project construction and operation pose in spreading the Valley Fever fungi spores.</p> <p>This approach to the health and safety impacts posed by Valley Fever contrasts markedly from California Energy Commission staff's approach to the impact in its recent environmental impact analysis of a renewable energy project proposed in Kern County.¹⁵³ There, the environmental impact analysis concluded that Valley Fever posed a real threat to worker safety, requiring mitigation.¹⁵⁴</p> <p>According to a comment from the Sierra Club to the CEC on this issue:</p> <p>CEC staff proposes Condition of Certification WORKER SAFETY-7 (amending Conditions of Certification AQ-SC-3 and AQ-SC-4) which requires that the Applicant develop an enhanced dust control plan that a) specifies mandatory wearing of dust masks (NIOSH N-9513 or better) for site workers whenever visible dust is present; b) implements</p>

¹⁵¹ See Exh. G: Michael L Mac Lean, M.D., M.S., Health Officer, Kings County, California, *Coccidioides Meningitis in Kings County A Public Health Perspective* (Dec. 1, 2011), see also Mac Lean, An Estimate on the Burden of Valley Fever in Kings County, available at: <http://www.countyofkings.com/home/showdocument?id=750>; see also The Epidemiology of Coccidioidomycosis in Six Counties 2011, available at: <http://www.countyofkings.com/home/showdocument?id=3018>.

¹⁵² The FEIR/S reports, for example that the BNSF Alternative would require 11,300,000 cubic yards of fill. See FEIR/S, p. 3.9-2. It does not state whether this is loose or compacted fill. Even if this is loose fill, and even if the assumed volume needed is accurate, transporting this massive volume of material would require 565,000 truck trips (assuming 20 cubic yards per load). Excavating this material would disturb more than 1,170 acres (assuming a 6-foot-deep pit). See Exh. H: Aggregate Soil Impacts 043014.

As discussed above (fn. 47, *supra*), constructing just CP2 and CP3 may require approximately 25,000,000 cubic yards of fill. Much more fill dirt may be required to construct the ICS, or the Section. Thus, the FEIR/S may substantially underestimate the impacts associated with extracting, transporting, screening, and compacting fill dirt for the Section.

¹⁵³ See Preliminary Staff Assessment for Hydrogen Energy California Project, available at: <http://docketpublic.energy.ca.gov/PublicDocuments/Delta/Delta/TN%2071444%2006-28-13%20Preliminary%20Staff%20Assessment%20-%20Draft%20Environmental%20Impact%20Statement.pdf>.

¹⁵⁴ See *id.* at pp. 4.8-6, 4.8-13, 4.8-114 – 4.8-115, 4.8-122, 4.16-14 – 4.16-20, . The CEC's analysis of this issue is incorporated herein by reference. We request that these pages from the PSA for the Hydrogen project be included in the administrative record for the Section.

Response	Primary Objection(s)
	<p>enhanced dust control methods (increased frequency of watering, use of dust suppression chemicals, etc.) immediately whenever visible dust comes from or onto the site; and c) limits the increase of downwind ambient concentrations of PM10 above upwind concentrations to 50 micrograms per cubic meter ("µg/m³").¹⁵⁵</p> <p>Sierra Club then recommended that "these enhanced dust control plans incorporate additional and more stringent mitigation measures for greater protection of workers and the public...."¹⁵⁶ These comments describe in detail the more stringent measures recommended.</p> <p>The CEC's analysis in the PSA, as well as Sierra Club's comments cited and quoted above (and the documents cited in those comments) constitute substantial evidence that <u>Project construction and operation present a risk of spreading Valley Fever</u> and that <u>enhanced mitigation to control fugitive dust is required</u>. The EIR/S must be revised to address this issue and recirculated for public review and comment.</p>
L005-143	The response does not address the City's concern that cumulative impacts have not been fully analyzed.
L025-5	See our comments regarding Standard Response GEN-13, above
L029-326	Neither the FEIR/S nor this response provides any information concerning the distinction analysts made between "large" farm parcels and "small" farm parcels. The FEIR/S does not even report the severance impacts to small farm parcels. Further, the response, like the FEIR/S, does not provide the reader with sufficient information to scrutinize the analysis and conclusions concerning severance impacts. Thus, the FEIR/S lacks substantial evidence supporting the conclusions concerning severance impacts to agricultural lands.
L029-335	This response, as with the FEIR/S, assumes without evidentiary support or analysis that impacts related to temporary construction staging, lay down, and assembly areas will be less than significant.
L031-1	The response states "to address the topics of channel and levee operations and maintenance activities, the clearance between the top of levee and the underside of the proposed bridges has been increased from 3 feet to a minimum of 18 feet, and the access on the landside of each levee bank has been improved." These changes in the design of crossings over the Kings River will result in new visual impacts and potentially other significant impacts as well.

¹⁵⁵ See Exh. I: Sierra Club Comments Recommending More Stringent Mitigation for Valley Fever.

¹⁵⁶ See *id.* at p. 3.

Response	Primary Objection(s)
	However, it's not clear that the analysis of this impact in the FEIR/S was changed at all following this substantial change in Section design. ¹⁵⁷
BO032 – 6	See our discussion regarding improper tiering in Section B.4, supra. See also our comments regarding responses GEN-01, GEN-20, and BO029-11, above. The response does not address how the inconsistencies in the assumptions concerning Project design prevent the Authority and FRA from tiering off of the PEIR/S documents. This is the central point of the comment, but the response ignores it.
BO032 – 7	The response claims that the PEIR/S documents “address the impacts of the full 800-mile system and cumulative impacts of the system as a whole.” ¹⁵⁸ As discussed above in the section concerning the FEIR/S inadequate analysis of cumulative impacts, the PEIR/S documents did not adequately address the Project’s cumulative impacts because they (1) relied upon incorrect assumptions concerning the Project’s footprint and (2) deferred much of the impact analysis to the second-tier level.
BO032-29	Contrary to this response, some of the secondary impacts caused by mitigation measures were not analyzed. For example, the Transportation section of the FEIR/S simply dismisses the possibility of any secondary impacts, without conducting any analysis or offering any substantiation. ¹⁵⁹ Further, the so-called “analysis” of secondary impact caused by biological resource mitigation measures is inadequate because it does not specifically identify the nature and severity of the impacts and does not explain the efficacy of applicable mitigation measures. ¹⁶⁰ Because the FEIR/S identified new or more significant impacts that will be caused by the implementation of mitigation measures, recirculation was required pursuant to CEQA. ¹⁶¹
BO032-29	See our discussion regarding the failure to analyze secondary impacts, in section II.B.E, supra. See also our comments regarding responses BO030-39 and L005-13, above.
BO032-30	The response asserts, without substantiation and apparently erroneously, that

¹⁵⁷ See FEIR/S, p. 3.16-94.

¹⁵⁸ See FEIR/S, p. 40-380.

¹⁵⁹ See FEIR/S, p. 3.2-124.

¹⁶⁰ See *id.* at pp. 3.7-213 – 3.7-225.

¹⁶¹ See, e.g., RDEIR/S, pp. 3.7-188 – 3.7-189 [discussion of habitat restoration and enhancement measure with no acknowledgement or analysis of potential secondary impacts]

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	the potential relocation of utility substations has been accounted for in both the impact analysis and the construction footprint. We have examined Appendix 3.1-A and the Section's alignment plans (Vol. III) and have not found any evidence that relocated substations were accounted for in the construction footprint. The FEIR/S impact analysis does not address the impacts or relocated utility substations.
BO032-31	See our discussion regarding the failure to analyze secondary impacts, in section II.B.E, supra. See also our comment regarding response L005-13, above. This response does not address the failure to analyze secondary impacts from sound walls, the central issue raised in this comment.
BO032-34	<p>Standard Response SO-01, cited in this response, does not address the comment. See our comment regarding Standard Response GEN-01, above.</p> <p>This response does not address the vagueness, uncertainty and unenforceability of SO-MM#2 and SO-MM#3.</p> <p>The response also does not address the failure to conclude that the impacts that MM-SO#3 is expected to address will be significant until more precise measures are developed.¹⁶²</p>
BO049-66 – 82	These responses do not address the specific concerns raised regarding the impact of two alternative Section alignments on J.G. Boswell infrastructure, including two rail spurs, and the indirect impacts to the vegetable oil processing facility, other facilities, and neighboring agricultural operations.
BO054-1 – 26	The investigation of baseline conditions for biological resources, the analysis of impacts to such resources and the proposed mitigation measures for these impacts are inadequate under CEQA, NEPA, and other laws and regulations. ¹⁶³
BO061-1	See our comments regarding Standard Response GEN-17, above. This Standard Response does not address the central point of this comment: how the escalating cost of the Project and of the ICS, together with the limited amount of available funding, may make it less likely that the Authority will have sufficient funding to do all that it has promised to do, including mitigating the impacts of this Section and of the ICS.
BO061-3	See our comments regarding Standard Response GEN-1, above. This Standard Response, like the RDEIR/S and FEIR/S, does not address the incorrect assumptions relied upon in the 2005 PEIR/S (e.g., 50-foot-wide ROW, sharing of

¹⁶² See FEIR, p. 3.12-146 – 3.12-147 [concluding impacts associated with displacing various facilities will be reduced to LTS levels through]

¹⁶³ See Exh. J: Comments Concerning Responses to Comments from Land Protection Partners. These comments are incorporated by reference.

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	freight railroad ROW, etc.). The Standard Response also does not explain the extent to which the PEIR/S documents deferred impact analysis to the project level. Given these incorrect assumptions and the deferral of impact analysis, the FEIR/S cannot rely upon the PEIR/S analysis.
BO061-5	<p>The case cited in this response, <i>Del Mar Terrace</i>, is easily distinguishable from the situation here. There, a court found that the highway segment at issue has independent utility from the future expansions contemplated by the agency.</p> <p>Here, in contrast, neither this Section nor the Merced to Fresno section have independent utility from each other. On the contrary, the Authority's ARRA application documents and other materials verify that it is only the ICS that has independent utility (neither of the sections could operate on its own). Further undercutting the Authority's independent utility argument is the fact that a decision concerning the central alignment for the Merced to Fresno section has been deferred, and the Authority now proposes to defer a decision on the alignment through Bakersfield. If these two sections have independent utility, then shouldn't they be complete sections that can function on their own?</p>
BO061-6	<p>This response, and numerous other responses cite the decision in <i>Dry Creek Citizens Coalition v. County of Tulare</i> (1999) 70 Cal.App.4th 20, 36 (<i>Dry Creek Citizens</i>) to defend the Authority's 15% design-build approach.¹⁶⁴ The facts of <i>Dry Creek Citizens</i> are easily distinguishable from the situation here for several reasons. First, the description of the stream diversion structures at issue in <i>Dry Creek Citizens</i> was fairly detailed: it included the dimensions of the structures, the materials that would be used to construct the structures, and maps and diagrams depicting the structures.¹⁶⁵ In contrast, for some project features at issue here, the FEIR/S does not provide any narrative description or map or plan showing its location. The FEIR/S lacks descriptions of how some project features will be constructed. The maps depicting the "project footprint" are not detailed enough to inform those not involved in preparing the EIR. If the transmission and substation upgrades, utility relocations, severed parcels, staging areas, batch plant locations and other project features were described to the same level of detail as the diversion structures in <i>Dry Creek Citizens</i>, it would be a substantial improvement in the FEIR/S.</p> <p>Second, the project at issue in <i>Dry Creek Citizens</i> was the expansion of a sand and gravel mine from 33.5 acres to 162 acres, whereas the area affected by this Section is 114 miles long and several hundred feet wide (including buffer areas and overcrossings). Thus, the somewhat vague description of stream diversion structures at issue in <i>Dry Creek Citizens</i> did not preclude a meaningful</p>

¹⁶⁴ See FEIR/S, p. 40-794.

¹⁶⁵ See *Dry Creek Citizens*, *supra*, 70 Cal.App.4th at pp 28-29.

Response	Primary Objection(s)
	<p>understanding of that project. In contrast, vague descriptions of electric infrastructure upgrades, temporary construction staging areas, locations of batch plants, severed parcels, quantity and sources of aggregate resources all have combined to preclude the reviewing public and decision makers to sufficiently understand the full scope and impacts of this Section. In these respects, the situation here is more akin to that in <i>Santiago County Water Dist. v. County of Orange</i> (1981) 118 Cal.App.3d 818, 829 [water delivery facilities not identified in EIR project description for sand and gravel mining operation].)</p> <p>Third, unlike the Petitioners in <i>Dry Creek Citizens</i>, commenters here have not insisted that “only precise engineering designs provide the necessary detail to analyze the environmental consequences of the entire project under CEQA.”¹⁶⁶ This is a straw man argument. Rather, commenters here understand that, while some degree of post-approval design refinement is probably necessary for a project this large, the Authority should <u>at least</u> comply with its own 15% design guidelines, and that the better approach would be follow the recommendation to complete a 35% design before commencing the environmental review process, but that, regardless of the percentage of design, all integral project components must be described sufficiently to enable an understanding of the project’s scope and a basis for the thorough impact analysis required under CEQA and NEPA. As the court in <i>Dry Creek Citizens</i> observed “The description must contain sufficient detail to enable the public and the decisionmakers to understand the environmental impacts of the proposed project.”¹⁶⁷</p> <p>This response ignores the comment concerning the Authority’s predecessor agency opining that at least a 35% level of design would be necessary to complete environmental review.¹⁶⁸ This opinion undercuts the Authority’s assertion that a 15% level of design is adequate. The Authority does not address this comment in <u>any</u> of its responses.</p> <p>With respect to the response to comments concerning the failure to analyze impacts from upgrading electricity infrastructure to connect the Project to the grid, see our comments regarding Standard Response PU&E-01, above.</p> <p>With respect to the response to comments concerning the failure to analyze severance impacts to agricultural lands, see our comments regarding Standard Responses AG-02 and AG-03, above.</p>
BO061-7	Neither this response nor the FEIR/S provides the analysis and substantiation

¹⁶⁶ See *id.* at p. 27.

¹⁶⁷ *Id.* at p. 36.

¹⁶⁸ See FEIR/S, p. 40-763 [excerpt from Intercity High Speed Rail Commission’s HSR Summary Report and Action Plan].

Response	Primary Objection(s)
	<p>required under CEQA and NEPA and requested in the comment.</p> <p>Providing the number of noneconomic parcels and their total acreage, as determined behind the scenes by two consultants, is nothing more than unsubstantiated opinion. It does not qualify as “substantial evidence” under CEQA. It also does not provide the public and decision makers the information necessary to allow them to test and verify the results. In addition, this reported number and acreage of severed parcels that were determined to be noneconomic do not explain the number and acreage of the severed parcels that were determined to be economic (and the reasons for these determinations).</p> <p>This response states that all severed parcels will be reanalyzed during the ROW acquisition process. Does this mean that if a severed parcel is determined to be noneconomic during this post-approval process, the acreage of that parcel will be added to the total acreage of permanently converted ag land, resulting increased mitigation for this impact? The response does not address this and other issues concerning the post-approval determinations that will be made.</p> <p>In the final paragraph of this response, the Authority states that it cannot provide “precise enumeration” of the total number/acreage of noneconomic/economic remainder parcels because it is <u>possible</u> that private undercrossing and overcrossings may be provided as an accommodation to some landowners. However, because it is highly unlikely that the Authority will invest scarce funding to accommodate many of the impacted landowners by constructing under- or overpasses, the analysis should have conservatively assumed that such private crossings will ordinarily not be provided and that all severed remainder parcels below a certain size and/or without access would be considered noneconomic and counted towards the total of permanently impacted agricultural lands.</p>
BO061-10	<p>This response does not address the potential for the Project to induce growth away from the alignment and its associated impacts.</p> <p>With respect to the possibility of ag land conversion around the Hanford-East station, the Authority must recognize that the prospects for protecting that land from station-related development are quite small. What more can the Authority do to prevent sprawl around this station? Since other alignment alternatives were ostensibly not chosen because of the inconsistency with local land use plans and the potential to induce sprawl, why was this station location selected when it clearly conflicts with these policies?</p>
BO061-12	<p>This response requested an explanation for why MM-Ag#2 was changed from an enforceable mitigation measure to a “project design feature.” This response does not provide the requested explanation.</p> <p>The response restates the requirement for the consolidation program to last at</p>

Response	Primary Objection(s)
	<p>least 5 years. There is no provision to require this program to last any longer than 5 years. What will happen at the end of the 5-year period to severed parcel remainders that have not been consolidated with neighboring properties, despite the Authority's efforts? Will these non-consolidated, non-economic severed parcels be added to the acreage of permanently impacted agricultural lands and will MM-Ag#1 require mitigation for them?</p>
BO061-13	<p>See our comments regarding Standard Responses GEN-01, GEN-04, and AG-02, above.</p> <p>Adding a reference to the Bay to Basin phase of the Project to the list of transportation projects in Appendix 3.19-B does not cure the defects in the cumulative impacts analysis. There is absolutely <u>no</u> substantiation to the claim that the cumulative impacts to agricultural lands from neighboring sections was considered in the FEIR/S. The geographic scope for ag land cumulative impacts undermines this claim, as does the lack of any technical reports or other referenced information that confirms neighboring sections were taken into consideration in the analysis.</p>
BO061-14	<p>The blanket assertion in this response that the 2012 Business Plan takes account of mitigation costs is inadequate. This claim is supported <u>only</u> by the <u>unsupported statement</u> in the business plan that: "To show the range of potential costs, the low cost estimate includes the cumulative lowest cost options, and the high cost estimate includes the cumulative highest cost options, both including environmental mitigation." (2012 Business Plan, p. 3-2.) Where is the substantiation or evidentiary support for this statement? If this is what the Authority chooses to cite in its response, one can presume that this is the best evidence available. But this best evidence is far from satisfactory.</p> <p>The cited 2012 Business Plan information regarding capital costs is equally unhelpful. Citation to a bullet point for a category of costs to be included in the estimate does not assure the reader that the Authority has sufficient funds for all capital costs to complete the ICS (much less the IOS) <u>and mitigate</u> the impacts. Where is the substantiation for the ROW cost estimates in the 2012 Business Plan? We assume that if the Authority had better evidence that it has the funds for ROW acquisition, ICS construction, and mitigation, it would provide better evidence of this.</p> <p>The Authority has <u>never</u> provided substantiation for these capital cost estimates.</p> <p>Furthermore, the Authority has never substantiated the assertion, raised in litigation, that the costs in the task orders for Master Agreements with agencies and other entities impacted by CP1 were somehow "double counted." The costs of the ICS and by extension the Project are indeed escalating beyond the estimates that the 2012 and the 2014 Business Plans advertise. The Authority</p>

Response	Primary Objection(s)
	<p>must acknowledge this and assure all impacted stakeholders that the promised mitigation will indeed be carried out. To be responsible, the Authority should not authorize acquisition of ROW properties and commencement of construction until it can do this.</p> <p>Of course extrapolating the costs from the first 29 miles of the Project is oversimplifying, but this is the type of analysis that concerned members of the public must engage in to get a realistic assessment of the capital costs associated with task orders.</p> <ul style="list-style-type: none"> • Has the Authority provided detailed estimates for the costs associated with crossing the Tahachapi Mountains to Palmdale? • Has it provided detailed cost estimates for the route over Pacheco Pass? • Has it provided detailed estimates for the costs associated with acquiring property in the Bay Area and in the L.A Basin and relocating the extensive infrastructure in these urban regions? <p>As to all of these questions: no, it has not. We can deduce, but due to the lack of disclosure by the Authority cannot prove, that these costs will be much greater than the costs associated for the Task Orders for the first 29 miles. This is a reasonable deduction based upon the evidence that is available to us.</p> <p>The Authority may “feel” that its cost estimates are reasonable, but can it prove it?</p> <p>Without this proof for its overall cost estimates for the Project and for CP1, how can the Authority assure impacted stakeholders that it has the funds to fulfill its mitigation obligations? While there may be sufficient Prime Farmland acreage in the four-county region, does the Authority have sufficient funds to protect the necessary number of acres?</p>
BO061-16	<p>See our comments regarding Standard Responses GEN-02, above.</p> <p>Neither the FEIR/S nor GEN-2 provide a satisfactory explanation for why an I-5 corridor alignment was eliminated from consideration as a full-fledged alternative before any real environmental or economic analysis was conducted. There is a real trade-off between the reduced impacts, lower cost, higher speed, and better end-to-end service of an I-5 corridor alignment and an alignment along the presently pre-ordained BNSF/UPRR hybrid corridor that twists and turns from Madera to Bakersfield.</p>
BO093 – 3	<p>See our comments regarding responses GEN-20 and BO032-7, above. One area of cumulative impact that the PEIR/S documents explicitly do not address (and which is a major concern for this commenter), is the impacts to agricultural lands caused by parcel severance.</p>

Response	Primary Objection(s)
BO093 – 10	See our comments regarding response TR-03, above. This response does not address the commenters concern regarding the traffic associated with ferrying HST riders and their luggage to and from parking facilities that are as far as 1 mile away from an HST station. ¹⁶⁹ Contrary to the assertion in TR-03 and in this response, the FEIR/S did not analyze these specific traffic impacts. ¹⁷⁰
BO093 – 12	Neither standard response GEN-01 nor this response addresses the concern expressed in the comment that the FEIR/S conclusions regarding the efficacy of mitigation measures outside of the Authority's control are not supported by substantial evidence. If the Authority cannot assure implementation of a mitigation measure, then it cannot find that the measure will be effective in reducing the associated significant impact.
BO093 – 15	This response, as with the RDEIR/S, fails to provide any information or substantiation for the conclusions concerning the efficacy of mitigation measures proposed for impacts to biological resources. As the comment noted, the RDEIR/S stated the Authority's "bare conclusions" regarding the efficacy of mitigation measures for these and other impacts. The response does not correct this pervasive problem.
BO093 – 17	See our comments regarding responses BIO-02 and GEN-01, above.
BO093 – 19	See our comments regarding responses SO-01 and AG-02, above. The response does not address the commenter's assertion that 40 feet of turnaround space will be required. The referenced settlement agreement term turnaround calling for mitigation of 25-feet of turnaround space may be inadequate if 40 feet of turnaround space is actually required.
BO093 – 30	See our comments regarding response BO025-10, above. This response repeats the unsupported assertion that "equipment is not expected to have to move significant additional distances to cross the HST line." The examples of increased out-of-direction travel provided in comments undermine this conclusion.
BO101-1 - 60	Environmental justice impacts were inadequately analyzed and insufficiently mitigated. ¹⁷¹

¹⁶⁹ See FEIR/S, p. 40-992. The FEIR/S changed the radius for excess parking surrounding stations to 0.5 miles, but even this distance could be prohibitive for HST riders to walk from their parked vehicles.

¹⁷⁰ See, e.g., FEIR/S, p. 3.2-92 [analysis of Fresno parking impacts with no discussion of traffic impacts associated with ferrying riders between the station and more remote parking areas].

¹⁷¹ See Exh. K: Comments Concerning Responses to Comments from Ybarra Company Public Affairs.

III. Recirculation is Required: New Sources of Unanalyzed Impacts Disclosed in Revisions to Environmental Analysis

The FEIR/S describes modifications to the Project and revisions to the impact analysis that either introduce new significant impacts or more severe significant impacts that are not mitigated to LTS levels. For example, the increase in severe noise impacts without mitigation triggers recirculation. In addition, the Authority reveals, for the first time, that the Section will have at least five more miles worth of sound barriers. It did not analyze the secondary air quality and visual impacts that will result from ICS construction and operation.

The FEIR/S also revealed, for the first time, new significant impacts to historic resources in downtown Fresno.¹⁷² These impacts should have been disclosed at the Draft EIR stage, so that the public would have the opportunity to scrutinize the analysis and the measures proposed to avoid or minimize the impacts. The Authority could and should have investigated these resources sooner, as they were identified in 2011 by commenters on the M-F EIR.¹⁷³

As discussed above, the failure to analyze Valley Fever and to mitigate the Project's potentially significant contribution to this serious health problem is a major omission. The EIR/S must be revised to consider the risks posed by Valley Fever and to avoid and minimize those risks.

The FEIR/S also fails to address secondary significant impacts associated with newly proposed mitigation measures for certain properties, intersections, and roadways, including:

- **TR MM#1** – TR MM#1: Access Maintenance for Property Owners: applicable to 46 properties (for BNSF Alternative) (an increase from 21 properties).¹⁷⁴
- **TR MM#7** – Widen Approaches to Intersections.
- **TR MM#8** – Add Turn Lanes to Intersections.

To the extent that the FEIR/S applies these mitigation measures to new locations that were not identified at the DEIR/S stage, it has introduced secondary impacts at these locations that have not been analyzed and mitigated. Introducing this and other significant new information now also triggers the requirement to recirculate a revised DEIR/S for public review and comment.¹⁷⁵

¹⁷² FEIR/S, pp. 3.17-49, 3.17-51 [discussion of discovered subterranean historic resources].

¹⁷³ See M-F FEIR, pp. 19-195 – 19-197 [Comments from Fresno City and County Historical Society].

¹⁷⁴ Compare FEIR/S, pp. 3.2-143 with RDEIR/S, p. 3.2-148.

¹⁷⁵ This, along with the other examples discussed above, illustrates the problem with refining the Section's design at this late stage of the environmental review process. The design of the various alternatives for the Section should have been better-developed before the environmental review process started, so that the analysis could accurately address the full scope of the Section's impacts.

While the FEIR/S retains the conclusory statement that none of the traffic mitigation measures would cause secondary significant effects, this statement is both unsupported by evidence and is obviously false. Such intensive and widespread roadwork will inevitably cause traffic, air quality and noise impacts, and potentially other impacts as well. The FEIR/S includes a new discussion of potential secondary impacts that could result from TR MM#6 through TR MM#8,¹⁷⁶ but this cursory dismissal of secondary impacts is not supported by any evidence or analysis.¹⁷⁷ Apart from a superficial and unsupported discussion in the FEIR/S, the Authority has apparently not made any real effort to analyze the impacts that would be caused by mitigation measures that it proposes to reduce Section traffic impacts to less-than-significant levels. If it has conducted an analysis of potentially secondary impacts, such an analysis is not apparent from the FEIR/S or from the referenced technical appendix. As such, at the very least, the Authority has violated CEQA by not providing the public with roadmap to its analysis of these potentially significant impacts, if such an analysis exists.

Further, because traffic impact analysis was generally much more detailed in urban areas than in rural areas, the impacts caused by the Section, as well as any applicable proposed mitigation measures, have not been adequately identified and analyzed in the FEIR/S.

In response to a comment by California Division of Oil, Gas, and Geothermal Resources, Bakersfield Office, the Authority identified approximately 96 active and inactive oil, gas, and water wells within 50 feet of the Section's ROW and a 50 foot buffer that would be impacted.¹⁷⁸ Apparently, the Section's potentially significant impacts to almost all of these wells was not previously disclosed.¹⁷⁹ The substantial increase in severity of this impact, with no mitigation measures identified to reduce it, also triggers recirculation.

The FEIR/S substantially underreported the amount of dirt needed for fill material. The FEIR/S states that the entire Section would require "11,300,000 cubic yards of fill (assuming no fill is provided by project excavation)."¹⁸⁰ This estimate conflicts with the amount of dirt that contractors preparing bids for CP2 and CP3 are seeking from local agencies and landowners. According to Tutor Perini representatives, for example, CP2 and CP3 alone will require more than 25,000,000 cubic yards of fill. Additional fill dirt would be necessary to construct the remainder of the Section. Thus, the FEIR/S underestimated, by at least 13,700,000 cubic yards, the amount of fill material that must be extracted, transported, placed, and compacted. Air

¹⁷⁶ See FEIR/S, p. 3.2-126.

¹⁷⁷ See *generally* FEIR/S, Transportation Technical Report [no discussion of secondary impacts or "Impacts Resulting from Implementation of Mitigation Measures"].

¹⁷⁸ See FEIR/S, pp. 38-21 – 38-25, 38-27; see also *id.* at p. 3.9-32 ["61 oil and gas wells within 200 feet of the centerline or within the construction footprints"].

¹⁷⁹ See RDEIR/S, p. 3.9-31 ["only two active oil wells, one water injection well, and two abandoned wells occur within the project footprint and a 50-foot buffer around the footprint"]. The RDEIR/S dismisses the significance of impacts associated with relocating oil and gas wells with scant analysis and no supporting evidence.

¹⁸⁰ FEIR/S, p. 3.9-1 – 3.9-2.

quality and traffic impacts will result from the extraction, transportation, placement, and compaction. Transporting this additional fill dirt will also damage roads. These much more severe impacts also trigger revision of the EIR and recirculation.

Further, the FEIR/S states, for the first time, that the Section is sufficiently long to be used for train testing.¹⁸¹ This new project feature will cause its own set of impacts. Most importantly, it introduces a new health and safety concern. If the Section, rather than the ICS, is to operate as a test track, the potential for accidents increases. The FEIR/S does not address these and other potentially significant impacts. It must be revised to address this issue as well.

Changes to the unavoidable impacts section of the EIR reveal new significant impacts that require recirculation. The EIR now discloses significant purportedly unavoidable impacts with regards to Environmental Justice and Mill Creek Linear Park and Kern River Parkway that had not been previously identified as significant. The Final EIR also claims impacts that had been found significant and unavoidable before- Air quality, biological resources, and 4(f) properties- are now insignificant. The mitigation measures for these impacts do not justify claiming the impacts are no longer significant but the measures do show that they are avoidable with further mitigation measures or alternatives.¹⁸²

IV. The Authority's Adoption of the Proposed Statement of Overriding Considerations Would Violate CEQA Because the FEIR/S Failed to Consider Feasible Alternatives and Mitigation Measures and Because the Authority's Findings Lack Substantial Evidence.

CEQA prohibits approval of projects with significant adverse environmental impacts if there are feasible alternatives or mitigation measures that would reduce or eliminate those impacts.¹⁸³ When an agency seeks to approve a project despite its significant unmitigated impacts on the environment, the agency must adopt a statement of overriding considerations.¹⁸⁴ A SOC must include two specific findings, supported by substantial evidence. The first finding that must be made is that "There is no feasible way to lessen or avoid the significant effect..." of the project.¹⁸⁵ The second finding is that the project's benefits outweigh its significant adverse environmental impacts.¹⁸⁶ These findings must both be supported by substantial evidence.¹⁸⁷

¹⁸¹ FEIR/S, p. 1-7.

¹⁸² Compare FEIR/S, p. 6-1 [Section concerning "Unavoidable Adverse Potentially Significant Impacts"] with RDEIR/S, p. 6-3.

¹⁸³ Pub. Resources Code, § 21002; CEQA Guidelines § 15021(a)(2).

¹⁸⁴ Pub. Resources Code, § 21081.

¹⁸⁵ CEQA Guidelines, §§ 15043, 15093(b).)

¹⁸⁶ *Id.* at § 15093(a).)

¹⁸⁷ *Id.* at § 15093(a)-(b).

Here, the Authority board is poised to adopt a SOC for the Section with a finding that specific considerations make infeasible the mitigation measures or alternatives identified by commenters and in the RDEIR/S.¹⁸⁸ The FEIR/S rejected as infeasible numerous alternatives and mitigation measures that might have made the Project more costly or less profitable, but would not have made it impractical to proceed. "CEQA does not authorize an agency to proceed with a project that will have significant, unmitigated effects on the environment...unless the measures necessary to mitigate those effects are *truly* infeasible."¹⁸⁹ "[I]f the project can be economically successful with mitigation, then CEQA requires that mitigation..."¹⁹⁰

A. Findings Concerning Agricultural Impacts.

Since the Authority has found that the Project's permanent conversion of 3,472 acres of agricultural land to non-agricultural use is a significant and unavoidable impact (AG Impact #1),¹⁹¹ the Authority may only approve the Project if all feasible mitigation to avoid or lessen this impact has been incorporated. But this has not occurred.

Instead, the Authority relies on AG-MM#1, which would allegedly place available agricultural land under agricultural conservation easements at a 1:1 ratio of what was lost, if it can identify suitable land offered by "willing sellers."¹⁹² The Authority finds, "there are no other feasible mitigation measures or alternatives that would reduce this impact to a less-than-significant level."¹⁹³ The Authority misconstrues CEQA's requirement, which is that a Project adopt all feasible mitigation measures or alternatives that would avoid *or lessen* a Project's significant impacts. As identified previously by CCHSRA, the County of Kings, and the Kings County Farm Bureau, and others impacts to agricultural lands would be lessened by the adoption of an alternative alignment parallel to SR-99 or I-5 or one that follows the BNSF ROW through Hanford, Corcoran, and other towns (the preferred alignment identified in the 2005 PEIR/S). Additionally, as stated above and elsewhere in submitted comments, other types of agricultural land mitigation (such as a program that funds enhancement of potentially productive agricultural lands) are feasible and available but the Authority has failed to adopt them. Accordingly, the Authority's findings lack the requisite substantial evidence.

¹⁸⁸ Findings and SOC, p. 7-1.

¹⁸⁹ *City of Marina v. Board of Trustees of the California State University* (2006) 39 Cal. 4th 341, 368 (*City of Marina*), emphasis added.

¹⁹⁰ *Uphold Our Heritage v. Town of Woodside* (2007) 147 Cal. App. 4th 587, 600.

¹⁹¹ Findings and SOC, p. 3-63.

¹⁹² *Ibid.*

¹⁹³ *Id.* at p. 3-64.

B. Findings Concerning Environmental Justice and Community Displacement Impacts.

State and federal agencies receiving federal funds, such as the Authority, are required by Executive Order 12898 and Title VI of the Civil Rights Act of 1964 to avoid environmental justice impacts. Even so, the FEIR/S identifies disproportionately high adverse effects on minority and low-income populations. These impacts include impacts under CEQA, such as the division and displacement of existing communities, which will be significant without mitigation.¹⁹⁴ However, federal law requires that the Authority avoid such impacts, not merely override them through a statement of overriding considerations. These impacts could be completely avoided by an I-5 or SR-99 alignment.

Title VI of the Civil Rights Act, Section 601, provides that “no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.” This provision prohibits discrimination in state or local programs or activities, including “permitting assessments, that receive federal funds.”¹⁹⁵ Section 602 allows a violation to be established by proof of unintentional discrimination or disparate impact.¹⁹⁶ The FEIR/S recognizes that the Project would have disparate impacts, but fails to avoid them, in violation of in violation of CEQA and the Civil Rights Act.

The Authority’s findings admit that the Section would displace the Fresno Rescue Mission, divide and displace an established community east of Hanford, and displace communities near Corcoran and Crome.¹⁹⁷ As these impacts would be significant, the Authority must find that it has incorporated all feasible mitigation measures to avoid or lessen its impacts on established communities. However, as discussed above, the Authority’s mitigation measures for environmental justice impacts are vague and deferred, calling for the development of future plans and programs for which no quantifiable performance standards have been set. Without performance standards or enforceable requirements of any kind, there is no guarantee that the proposed outreach, relocation, reconstruction, or acquisition will be effective. For example, SO-MM#2 indicates the Authority will “consult with officials and representatives of community facilities affected by significant noise impacts ... to identify suitable noise abatement measures or to help affected businesses and organizations find more suitable locations,” but the measure does not require the Authority to actually provide the suitable noise abatement measures or to locate suitable locations for displaced facilities and businesses. The Authority’s commitment to hosting three workshops will be meaningless if the workshops will promote an ineffectual abatement program. Similarly, SO-MM#3 provides

¹⁹⁴ *Id.* at p. 3-51.

¹⁹⁵ Executive Order 12,898 and Title VI as Tools for Achieving Environmental Justice, US Commission on Civil Rights, October 2003, p. 31; available at <http://www.usccr.gov/pubs/envjust/ej0104.pdf>.

¹⁹⁶ *Ibid.*

¹⁹⁷ Findings and SOC, p. 3-52.

essentially the same language for the relocation of important facilities, without actually requiring the relocation of such facilities.¹⁹⁸ Findings regarding the effectiveness of these measures lack substantial evidence and cannot support Project approval.

The Authority improperly relied upon these vague and deferred mitigation measures to reject more detailed mitigation measures suggested by commenters, claiming either that its future plan already provides the requested measures.¹⁹⁹ (Findings and SOC pp. 6-14 through 6-18.) However, without greater detail in the Authority's mitigation measures for environmental justice and community impacts, substantial evidence does not support this finding.

The Authority also rejected mitigation measures proposed by commenters to reduce the permanence of agricultural impacts. One suggested mitigation measure is that the Project either trench or tunnel through the Hanford area, as has been proposed for the HST's Santa Clarita alignment. The suggestion of this mitigation measure for another portion of the HST project that would divide an established community demonstrates its feasibility here.²⁰⁰ The Authority did not address tunneling or trenching as a mitigation measure or alternative through Hanford, and instead rejected the use of tunneling or trenching for the entirety of the Section.²⁰¹ The Authority based its rejection on financial infeasibility and on the need for a wider alignment in places used for trenching, which would increase land acquisition costs. The Authority has not provided support for rejecting trenching or tunneling through Hanford alone, at a fraction of the cost, when tunneling would eliminate the Project's significant impacts on community division, displacement, and agriculture. The Authority's improper rejection of these feasible mitigation measures violates CEQA and renders its adoption of a statement of overriding considerations unlawful.

The Project's significant impacts relating to community division and displacement extend to rural communities. According to the Findings:

The displacement of numerous farm homesteads in a region that takes pride in its agricultural heritage and where agriculture is a dominant economic activity would cause disruption not only to the individual property owners but also to the wider agricultural community.²⁰²

¹⁹⁸ *Id.* at p. 3-54.

¹⁹⁹ *Id.* at pp. 6-14 – 6-18.

²⁰⁰ *Western States Petroleum Association v. Southern California Air Quality Management District* (2006) 136 Cal.App.4th 1012, 1020 [no evidence showed refineries could not make the same air pollution control changes one refinery made or that the cost of such changes would be prohibitive].

²⁰¹ Findings and SOC p. 5-10.

²⁰² *Id.* at p. 3-55.

Unfortunately, the Findings rely on the same suite of deferred and vague mitigation measures.²⁰³ The Authority's claim that the measures "will substantially lessen or avoid the project's impacts relating to effects on the regional agricultural economy" to a level below significance is entirely unfounded.²⁰⁴

Additionally, pursuant to CEQA Guidelines § 15088.5, the EIR/S must be recirculated because the FEIR/S discloses, for the first time, that environmental justice impacts are significant.

C. Findings Concerning Air Quality Impacts.

The Authority's finding that the Project will not result in significant air quality impacts during construction is unsupported. The Findings detail the Project's significant, adverse emissions of volatile organic compounds, nitrogen oxide, and particulate matter, but defers the formulation of the relevant mitigation measure.²⁰⁵ AQ-MM#4 claims that the Authority will enter into a voluntary emissions reduction agreement (VERA) to offset the Project's impacts to net zero, but no such VERA has been approved or implemented, and no performance standards or proposed modes of compliance have been specified. In fact, the VERA has not been publicly circulated at all, as was requested by the Environmental Protection Agency. Consequently, the Authority's finding that the Project will not have significant construction impacts is unsupported by substantial evidence. The Authority's approval of the Project would violate CEQA.

D. Findings Concerning Growth-Inducing Impacts.

The Authority's findings regarding regional growth recognize that the Project would induce growth substantially beyond what is projected in city and county general plans "near Hanford" in at least two impact areas that are deemed significant and unavoidable. These impacts are LU Impact #4 – indirect effects on surrounding land uses at Kings/Tulare Regional Station East and LU Impact #5 – potential for future increased density and transit oriented development at Kings/Tulare Regional Station East.²⁰⁶ The Project and Project-related growth are inconsistent with the City of Hanford and County of Kings general plans and other planning documents. The Authority was therefore required to implement all feasible alternatives and mitigation measures to lessen or avoid the potential growth impacts in Hanford. The EPA has previously recommended that the Authority make commitments to take measures to limit induced growth.

²⁰³ *Id.* at p. 3-56.

²⁰⁴ *Ibid.*

²⁰⁵ *Id.* at p. 3-17.

²⁰⁶ *Id.* at p. 7-1.

In order to avoid these significant, adverse impacts, CCHSRA, the County of Kings and the Kings County Farm Bureau have advocated the adoption of a Section alignment parallel to SR-99 or I-5. As explained below, the Authority improperly rejected these alternatives.

E. Findings Concerning the Alternatives Analysis.

The I-5 and SR-99 alternative alignments would avoid or lessen many of the Project's adverse impacts to land use, agriculture, and biological resources, while providing greater ridership estimates and faster travel times consistent with the Authority's statutory responsibility. Even so, the I-5 and SR-99 alignments were rejected with very little consideration in the EIR/S in favor of an alternative with myriad significant and unavoidable impacts.

However, no evidence in the EIR/EIS supports the Authority's findings. A good portion of the Authority's rationale for rejecting the I-5 and SR-99 alignments seems to be based on a nonbinding, "prior determination that serving intermediate markets in the Central Valley, rather than bypassing them, is an important component of the high-speed train system."²⁰⁷ But the SR-99 alternative alignment would pass through the most-developed portions of the Central Valley, while utilizing an existing transportation corridor that would have lower acquisition costs and fewer environmental impacts caused by greenfield development. As a result, the SR-99 alternative would most effectively satisfy the Authority's objectives, including several objectives the preferred alignment cannot satisfy ("maximize intermodal transportation opportunities by locating stations to connect with local transit, airports, and highways," "maximize the use of existing transportation corridors," and "provide intercity travel in a manner sensitive to and protective of the region's natural and agricultural resources"). The SR-99 alternative would also most effectively implement Streets and Highways Code requirements that the "the alignment shall follow existing transportation ... corridors," "Stations shall be located in areas of good access to local mass transit," the system "be planned and constructed in a manner that minimizes urban sprawl and impacts on the natural environment" and that the HST preserve wildlife corridors and mitigate impacts to wildlife movement, where feasible.²⁰⁸

The Authority's findings rejecting the SR-99 alternative refer to permits required under section 404 of the Clean Water Act, CEQA compliance, and the concerns of Union Pacific Railroad, a private company.²⁰⁹ However, all Project alignments will require obtaining a dredge and fill permit to cross the San Joaquin, Kings, and Kern rivers; all alignments require compliance with CEQA. Further, a private company's concerns about interference with its business is an improper ground for rejecting an alternative for a statewide project, especially since rejection of the SR-99 alternative itself will negatively impact thousands of acres of farmland and many private businesses. Since the alternative was not developed, evidence does

²⁰⁷ *Id.* at p. 5-1

²⁰⁸ Streets and Highways Code § 2704.9(g), (h), (i), (j)

²⁰⁹ Findings and SOC pp. 5-8 – 5-9.

not support the Authority's claim that Caltrans-compliant interchanges could not be developed near SR-99.

Despite the Authority's rejection of Streets and Highways Code § 2704.09 with regard to the superiority of the SR-99 alternative, the Authority relies on the code's requirement that HST stations maximize intermodal transportation opportunities to reject the I-5 alternative. However, as the preferred alternative fails to meet at least 4 of the requirements of the same code section, this ground for rejection lacks substantial evidence. Additionally, the Authority claims that an I-5 alternative would result in lower ridership because the western portion of the Central Valley is less populated, when it would in fact result in higher ridership due to faster travel times and less expensive construction and operation costs.

Thus, the Authority's rejection of these alternatives is improper, and its statement of overriding considerations is unsupported.

F. Stated Project Benefits Lack Evidentiary Support.

The Authority's Statement of Overriding Considerations is premised upon the claim that the project will benefit Californians by improving air quality, reducing greenhouse gas emissions, eliminating congestion between cities. CEQA requires substantial evidence in the record to support the claimed benefits of the Project that justify proceeding with a project notwithstanding its adverse impacts.²¹⁰ However, the record is rife with evidence that the Project will not actually provide the stated benefits. "[A]n agency's unsupported claim that the project will confer general benefits" is insufficient to override a project's significant impacts.²¹¹

For example, the Statement claims the HST System will "provide substantial improvement in air quality" by reducing vehicle miles travelled and by reducing greenhouse gas emissions.²¹² However, in the FEIR/S, the Authority revised its forecast of carbon dioxide emissions benefits downward to 1.9 – 2.8 million metric tons per year, down from the 5.3 – 6.3 million metric tons per year disclosed in the DEIR/S.²¹³ This emissions benefit will likely decrease, as the Authority vastly overstates the number of motorists who will abandon their personal vehicles to use the Project.²¹⁴ This is especially true given the Authority's insistence that the Project will not be a viable choice for daily commuters, who make up the greatest portion of California's emissions due to vehicle miles travelled.²¹⁵ The Statement also ignores

²¹⁰ Pub. Resources Code, § 21081; CEQA Guidelines, § 15093(b)

²¹¹ Woodward Park Homeowners Ass'n, Inc. v. City of Fresno (2007) 149 Cal.App.4th 892, 717.

²¹² Findings and SOC p. 7-7.

²¹³ FEIR/S, p. 3.3-66 [Table 3.3-15].

²¹⁴ See Exh. F: Comments of Blue Sky Consulting Group, April 30, 2014, pp. 3-4.

²¹⁵ FEIR/S p. 35-26["The HST will not be a below market cost, subsidized commuter rail service, but instead would provide rapid long-distance travel, priced at commercial market rates. HST fares are expected to be tied to typical airplane fares"].

that the Project's mitigation for air quality impacts due to construction, a VERA, has not yet been approved and implemented. The Project's small benefit to greenhouse gas emission reductions and air quality improvement cannot outweigh its enormous costs.

With regard to transportation, the Authority's claim of a Project benefit is premised upon the inaccurate idea that "the interstate highway system, commercial airports, and conventional passenger rail system...are operating at or near capacity."²¹⁶ Commercial airports and the conventional passenger rail system base their offerings on consumer demand. Accordingly, rail and train offerings to consumers expand and contract based on that demand. If more intercity flights are demanded, airlines will provide them at the many airports with remaining capacity. In Southern California alone, capacity remains at the Burbank, Ontario, and San Bernardino airports. The brand new San Bernardino airport sits nearly empty. Palmdale's commercial operations, recently dormant, can accommodate passenger travel once again. The Amtrak passenger train system also retains capacity for additional travelers. Finally, outside of Thanksgiving week and urban areas, sufficient capacity remains on I-5, SR-99, and U.S. 101, California's main north-south highway arteries, to accommodate years of growth. The Authority's claim that the system will improve travel options in smaller Central Valley towns and cities is contradicted by the Authority's admission that the system's fares will discourage short and frequent trips. No support is provided for the claim that the system would be insulated from adverse weather events in a way that automobile or conventional travel is not.²¹⁷

The Statement of Overriding Considerations claims a Project benefit in that the Section "provides an essential building block to establish very high-speed passenger service."²¹⁸ But this means that the Section is part of the project examined in the Tier 1 programmatic EIR. This is not a benefit that justifies the Project's great environmental cost.

Another illusory Project benefit is that the Section "provides a valuable transportation asset for potential use by conventional rail."²¹⁹ The document admits, "It may not be necessary or appropriate to allow for such interim use ... and the Authority is not approving such use." (*Ibid.*) Moreover, as the Section alignment does not run through Amtrak stations – or any existing stations – it would not provide a benefit to Amtrak operations or riders. The Section's use as a test track would also preclude its use by conventional passenger trains, rendering this "benefit" unsupported by substantial evidence.

The Project's economic and employment benefits from construction are exaggerated and do not appear to take into account the economic and employment losses that the Section's construction would cause. The removal of thousands of acres of productive agricultural land

²¹⁶ Findings and SOC p. 7-6.

²¹⁷ *Ibid.*

²¹⁸ *Id.* at p. 7-4.

²¹⁹ *Ibid.*

from production, and the isolation of other acreage, would result in great losses to the Central Valley economy, which the Statement acknowledges “has suffered very high unemployment during the recent recession.”²²⁰ When combined with still-unquantified Project costs and the adverse impacts to non-agricultural businesses along the Section alignment, the Project may not actually provide an economic benefit. The same deficiency applies to the Project’s claimed land use and planning benefits.²²¹

The claimed economic and social benefits appear limited to jobs created by construction, given that the Project is unlikely to break-even and the Authority’s admission that the system will not be competitive for commuter use. Accordingly, there is no support for the contention that businesses located near an HST station could operate more efficiently than businesses located elsewhere or that the system will enhance and strengthen urban centers. The claim that property values will increase near HST stations is similarly unsupported. Even if true, such a benefit is likely to be outweighed by decreases in property values along the system’s tracks.

Curiously, the Authority has also found that the Project’s significant and unavoidable impacts on “are overridden by each of these individual considerations, standing alone.”²²² But there is no support for the contention that the Project’s enormous environmental justice, noise, land use, agricultural, aesthetic, and cultural impacts – including the loss of thousands of acres of productive agricultural land – are justified by the Project’s use as a test track.²²³

The discussion concerning asserted Project benefits also fails to acknowledge the tremendous uncertainty concerning the Authority’s ability to construct Phase 1 of the Project, or even the IOS, given the funding shortfall of more than \$20,000,000,000 for the IOS. The Statement of Overriding Considerations must acknowledge that the promised Project benefits are highly uncertain.

Thus, the Authority’s findings regarding the rejection of alternatives and mitigation measures and regarding project benefits lack substantial evidence, thereby violating CEQA²²⁴ and fail as a basis for the Authority’s Statement of Overriding Considerations.²²⁵

As with the rest of the comments submitted by CCHSRA, the County of Kings, and the Kings County Farm Bureau, the deficiencies of the Project’s Findings and Statement of Overriding Considerations include, but are not limited to, those discussed in this letter. The

²²⁰ *Id.* at pp. 7-4 – 7-5

²²¹ *Id.* at pp. 7-8 and 7-9 [where some benefits are concurrent with adverse land use and agricultural impacts].

²²² *Id.* at p. 7-3.

²²³ *Ibid.*

²²⁴ CEQA Guidelines, § 15091(b)

²²⁵ *Id.* at § 15093(b).

328-page document was released after the FEIR/S, permitting limited time for review and analysis of its contents.

V. Conclusion

The FEIR/S fails to correct the myriad deficiencies identified in comments on the DEIR/S and RDEIR/S. In addition, as outlined above, responses to many comments do not provide the good faith, reasoned, and factually supported analysis required – many responses obscure rather than clarify the analysis. The Standard Responses gloss over and do not adequately address the concerns expressed in comments, contrary to claims in the FEIR/S. Further, significant new information has been added to the FEIR/S and has arisen without inclusion in the FEIR/S, requiring its recirculation for public review. Accordingly, the FEIR/S fails to fully comply with CEQA and should not be certified.

Very truly yours,

Holder Law Group

Chatten-Brown & Carstens LLP


Jason W. Holder
Douglas P. Carstens

Enclosures:

- Exh. A: RFP Map for CP1
- Exh. B: Email Chain re ICS Value Engineering
- Exh. C: Letter from EPA to FRA and Authority re M-F Administrative Draft FEIR/S
- Exh. D: E-mail re Post-FEIR/S Protocol-Level Surveys
- Exh. E: Comments Concerning Responses to Comments from Ybarra Company Public Affairs
- Exh. F: Comments Concerning Responses to Comments from Blue Sky Consulting Group
- Exh. G: Michael L Mac Lean, M.D., M.S., Health Officer, Kings County, California, Coccidioidal Meningitis in Kings County A Public Health Perspective
- Exh. H: Aggregate Soil Impacts
- Exh. I: Sierra Club Comments Recommending More Stringent Mitigation for Valley Fever
- Exh. J: Comments Concerning Responses to Comments from Land Protection Partners

cc: (Via E-mail Only)
Surface Transportation Board
Chairman Elliot and Honorable Board Members
c/o Joseph Dettmar, Chief of Staff,
E-mail: dettmarj@stb.dot.gov

U.S. Environmental Protection Agency, Connell Dunning, Dunning.Connell@epa.gov
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State Water Resources Control Board, Cliff Harvey, clifford.harvey@waterboards.ca.gov

Aaron Fukuda, Co-Founder CCHSRA
Colleen Carlson, County Counsel, Kings County
Diane Friend, Executive Director, Kings County Farm Bureau
Virginia "Ginny" Gennaro, City Attorney, Bakersfield
George J. Muhlsten, counsel for Coffee-Brimhall, LLC
Ray Carlson, counsel for J.G. Boswell, Co.

From: Kohlstrand , Rebecca <parsonsrk@pb.com>
Sent: Monday, February 13, 2012 1:30 PM
To: Siu, Wai-on <SiuW@pbworld.com>; Chirco, John <Chirco@pbworld.com>
Cc: Kuo, Johnny <KuoJo@pbworld.com>; Bittancourt, Melisa <Bittancourt@pbworld.com>; Cameron, Craig <Cameron@pbworld.com>; Jong, Ken E. <Jong@pbworld.com>; Tracy, Thomas <TracyT@pbworld.com>; Valentine, Peter <Valentine@pbworld.com>; Porter, Bryan <Porter@pbworld.com>
Subject: RE: ICS Value Engineering

I have not had a chance to review the VE report, but I am concerned about any new intrusion into the floodplain and would encourage alternatives to this. I will be requesting additional input from the environmental team, but new floodplain fill would require new environmental analysis beyond what is included in the MF Final EIR/EIS.

Rebecca

From: Siu, Wai-on
Sent: Monday, February 13, 2012 10:24 AM
To: Chirco, John; Kohlstrand , Rebecca
Cc: Kuo, Johnny; Bittancourt, Melisa; Cameron, Craig; Jong, Ken E.; Tracy, Thomas; Valentine, Peter
Subject: RE: ICS Value Engineering

John,

Thank you for send us the findings on MF design approach and recommendations for future developments. While most of the items are "GENERIC" to the project item 11 is specially for MF segment. I would like to share my observation with the team as follows: -

ORIGINAL CONCEPT:

Original concept: Retained fill transitioning to structure south of road 33. Bents 1-6 appear to be over farmland and bents 7-13 appear to be in a flood plain.

ALTERNATIVE CONCEPT:

Replace retaining walls and bents 1-6 with earth embankment. Bents 7-13 remain on structure due to assumed cost of retained fill increasing beyond the cost of a structure. If Road 33 remains open then place in 40' culvert and backfill.

Although not shown on the plans our design is based on typical x-section produced by AECOM using max. 24' (measured from TOR to OG) for height of retained fill. So far, we have received no comment objecting to this 24' max assumption. Yes it is correct that we can replace bents 1-6 by extending the retain fill for another 500+ feet; however, the concern is potential differential settlement on either side of the abutment if back-fill being thicker than 21.5'. With the current design we have already taken into consideration of cross traffic for farmers and farming equipments. Extending the retained fill section would create inconvenience to farmers getting access.

Perhaps, for the benefits of other segments, if EMT can come up with a more specific guidance on preferred max. height of retained structure taking into consideration of possible differential settlement developed over times on either side of the abutment wall.

Another observation on items 24 and 25, which are contradicting. Please see red highlighted extracts below: -
Item 24

ORIGINAL CONCEPT:

Current procurement approach is for Request for Proposal (RFP) to include only the Geotechnical Data Report, inclusive of 'raw' geotechnical data. A Geotechnical Baseline Report (GBR), inclusive of interpretative assessment and quantitative data, is not included in the RFP.

ALTERNATIVE CONCEPT:

An alternative procurement approach would be for the RFP to include additional geotechnical data to replace the Geotechnical Baseline Report with interpretative data for use by the bidder in estimating the geotechnical and structural designs. Geotechnical data could be collected by one or more regional consultants or program management team.

Item 25

ORIGINAL CONCEPT:

Current procurement approach is for Request for Proposal (RFP) to include only the Geotechnical Data Report, inclusive of 'raw' geotechnical data. A Geotechnical Baseline Report (GBR), inclusive of interpretative assessment and quantitative data, is not included in the RFP.

ALTERNATIVE CONCEPT:

An alternative procurement approach would be for the RFP to include a Geotechnical Baseline Report with interpretative data for use by the bidder in estimating the geotechnical and structural designs. Geotechnical data could be collected by one or more regional consultants or program management team.

Wai-on Siu
Regional Engineer (Merced - Fresno)
Parsons Brinckerhoff
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From: Chirco, John
Sent: Wednesday, February 08, 2012 6:17 PM
To: Tracy, Thomas; Valentine, Peter; Kohlstrand, Rebecca
Cc: Kuo, Johnny; Bittancourt, Melisa; Siu, Wai-on; Cameron, Craig; Jong, Ken E.
Subject: ICS Value Engineering

Tom, Peter, Rebecca,

Attached is the list of Value Engineering ideas with scores that was developed in Tuesday's workshop. Please review the highlighted 'Yes' Ideas and identify any ideas that do not appear to be reasonable to pursue based on compliance with project constraints, including.

- Environmental Documents (EIR/S)
- Basis of Design
- CP#1 Scope of Work
- CP#1 Schedule
- Independent Utility

- Aesthetics

As information, our in-progress VE Design Suggestion Alternatives are posted to PSolve. We plan to transmit these in draft form on Friday.

https://ww3.projectsolve2.com/eRoom/SFOF7/Engineering/0_cb5d9

Please let me know of questions.

Thanks,

John C.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

MAY 01 2012

David Valenstein
Federal Railroad Administration
1200 New Jersey Avenue, SE
Mail Stop 20, W38-219
Washington, DC 20590

Tom Fellenz
California High Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814

Subject: Final Environmental Impact Statement for the California High-Speed Rail System,
Merced to Fresno Section

Dear Mr. Valenstein and Mr. Fellenz:

Thank you for the opportunity to review the Final Environmental Impact Statement (FEIS) for the Merced to Fresno Section of the High-Speed Rail (HSR) System in California, which was shared with U.S. Environmental Protection Agency (EPA) on April 18, 2012. We completed our review pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), Section 309 of the Clean Air Act, and Section 404 of the Clean Water Act.

EPA has worked closely with Federal Railroad Administration (FRA) and California High-Speed Rail Authority (CHSRA) through the programmatic environmental analysis, as well as through intensive early coordination at the project level. Project level coordination was guided by specific decision checkpoints, which are defined in an agreement signed between EPA, U.S. Army Corps of Engineers, FRA, and CHSRA (*Integrated National Environmental Policy Act and Clean Water Act Section 404 Memorandum of Understanding (NEPA/404 MOU)*). We appreciate the opportunity to engage in early coordination, and we believe that it will continue to lead to efficient resolution of potential issues and strengthened environmental documents as the environmental analysis of the statewide HSR system continues.

For the Merced to Fresno portion of the HSR system, EPA provided recommendations through a formal comment letter (October 13, 2011) following our review of the Draft Environmental Impact Statement (DEIS). We again provided recommendations via a March 28, 2012 comment letter following our review of the Administrative FEIS. We appreciate the responsiveness to multiple recommendations provided by our agency throughout the coordination and commenting process to date. Through this letter, we note remaining concerns that were not addressed in the FEIS and can be addressed in the Record of Decision (ROD) by documenting commitments for the final design and construction phase. The enclosure to this letter provides additional description of EPA's remaining recommendations, which include, but are not limited to, the following:

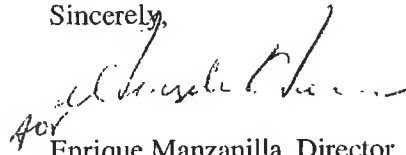
- Air Quality Impacts
 - Continue to work with the San Joaquin Valley Air District and EPA to finalize the general conformity determination for the San Joaquin Air Basin portion of the project.
 - Provide commitments for identified air quality mitigation measures to reduce construction and operational emissions to the greatest extent.
- Aquatic Resource Impacts
 - Commit to avoidance and minimization measures identified by FRA and CHSRA during the NEPA/404 MOU process and checkpoints.
 - Commit to a set of low impact development measures to retain, infiltrate, and treat stormwater runoff from all features of the HSR project.
- Planning and Growth Related Impacts
 - Commit to continue partnering with the Cities of Fresno and Merced to promote strong station-area planning in order to maximize economic, community and environmental benefits from the project.
 - Recognize the planning efforts that are needed at urban edges of station-cities and neighboring communities in order to prevent unplanned HSR induced growth, and commit to partnering and providing support to promote good planning.
 - Commit to assess which agricultural lands outside of Fresno and Merced are most at risk of experiencing HSR induced development pressures, and commit to promote placement of conservation easements in those locations.
 - Commit to partner with local and regional transit providers to develop connectivity plans and implement measures to increase transit access to HSR.

More information on the above items and additional recommendations are provided in the detailed comments section enclosed within this letter. EPA recognizes the potential environmental benefits, including reduced vehicle emissions, which an alternative transportation choice like HSR can provide if planned well. In addition to being a cleaner transportation option, we understand that a well-planned HSR system can serve as an important catalyst for improved regional connectivity and strengthened economic centers. We are committed to continued coordination with FRA and CHSRA as the environmental review process for the entire statewide HSR system continues. In addition, we appreciate our ongoing partnership with FRA, CHSRA, U.S. Housing and Urban Development, Federal Transit Administration, and California Strategic Growth Council under the *Memorandum of Understanding for Achieving an Environmentally Sustainable HSR System for California*, signed in September 2011. We encourage FRA and CHSRA to continue to collaborate with EPA on best practices for maximizing environmental, economic, and community benefits from this project, while also identifying opportunities to avoid, minimize, and mitigate adverse impacts.

We appreciate the opportunity to review the Merced to Fresno FEIS and we would appreciate the opportunity to discuss our comments prior to release of the ROD. When ROD is signed, please send a copy to the address above (mail code: CED-2). If you have any questions, please contact me at 415-972-

3843 or Connell Dunning, the lead reviewer for this project, at 415-947-4161 or dunning.connell@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Enrique Manzanilla".

Enrique Manzanilla, Director
Communities and Ecosystems Division

Enclosures: EPA's Detailed Comments

Cc via email:

Mark A. McLoughlin, ICF International
Colonel Michael C. Wehr, U.S. Army Corps of Engineers
Leslie Rogers, Federal Transit Administration
Ophelia B. Basgal, U.S. Department of Housing and Urban Development
Dan Russell, U.S. Fish and Wildlife Service
Robert Tse, U.S. Department of Agriculture
Michelle Banonis, U.S. Bureau of Reclamation
Ken Alex, Governor's Office of Planning and Research
Heather Fargo, Strategic Growth Council
Matt Rodriguez, California EPA
Kurt Karperos, California Air Resources Board
Seyed Sadredin, San Joaquin Valley Air Pollution Control District
Traci Stevens, Business Transportation and Housing
Garth Fernandez, California Department of Transportation
Diana Dooley, California Health and Human Services
John Laird, California Natural Resources
Julie Vance, California Department of Fish and Game
Brian R. Leahy, California Department of Conservation
Paul Romero, California Department of Water Resources
Bill Orme, State Water Resources Control Board
Mayor William Spriggs, City of Merced
Mayor Ashley Swearengin, City of Fresno

1. AIR QUALITY

EPA understands that California High Speed Rail Authority (CHSRA) is currently coordinating with the San Joaquin Valley Air Pollution Control District (SJVAPCD) and California Air Resources Board (CARB) regarding Clean Air Act general conformity requirements, including a Voluntary Emissions Reduction Agreement (VERA) for the high speed rail (HSR) system.

Recommendations for the Record of Decision (ROD):

- EPA recommends that FRA and HSR continue to work with the SJVAPCD and EPA to finalize the general conformity determination for the San Joaquin Air Basin (SJAB) portion of the project. Describe the process for finalizing the general conformity determination in the ROD and clarify that emissions from any interim use of the new tracks will be accounted for in final emissions inventories.
- Include details of the Voluntary Emissions Reduction Agreement (VERA), including specific incentives and strategies for focusing emissions reductions proximate to actual impact locations in order to focus mitigating measures to those communities most impacted.

EPA is supportive of the many project design features and mitigation measures identified in Section 3.3.8 and 3.3.9 of the Final Environmental Impact Statement (FEIS) to reduce air quality impacts. It is stated in the FEIS that a site specific Health Risk Assessment (HRA) for the Heavy Maintenance Facility (HMF) will be conducted once a final HMF site is chosen. EPA continues to recommend that an analysis of health risk be used to help inform the choice of where to site the HMF.

Recommendations for the ROD:

- Provide commitments for the project design features and mitigation measures identified in the FEIS to ensure that air quality impacts from construction and operation of the HSR system are mitigated to the greatest extent possible.
- Provide details regarding any future health risk analysis that will be conducted prior to selecting a site for the HMF and how this analysis will be made available to the public.

2. AQUATIC RESOURCES and CLEAN WATER ACT

Developing a Final Mitigation Plan for Clean Water Act (CWA) Section 404 should be a key priority for FRA and CHSRA, as it will help avoid potential delays during project permitting. EPA will continue to work with the U.S. Army Corps of Engineers (Corps) to provide guidance to FRA and CHSRA to reduce uncertainty to the maximum extent practicable and provide substantive comments on the development of a Final Mitigation Plan.

During future CWA Section 404 permitting coordination, we recommend continued use of the approved Watershed Approach. Specifically, the Conditional Rapid Assessment Method (CRAM) and Watershed Evaluation Report (WER) (submitted during Checkpoint C of the NEPA/404 MOU process) provided information to fully describe the location, condition and context of the impacted landscape. The analysis showed approximately 1/3 of vernal pools and other non-riverine wetlands, and 1/4 of riverine wetlands along the HSR alignments were in good

condition. We note that these results were not described in the FEIS; however this information will assist in 1) providing context to the current and impacted resource conditions, 2) disclosing the project's mitigation needs, and 3) providing assurances that those needs will be met.

Recommendations for the ROD:

- Commit to and describe measures to avoid and minimize impacts to waters of the U.S., (including additional avoidance measures proposed in Chapter 5 of the NEPA/404 MOU Checkpoint C Summary Report) and provide a summary of proposed compensatory mitigation for unavoidable impacts.
- Disclose the project's mitigation needs and provide assurances that those needs will be met. Provide a summary of key findings and analyses conducted during the California Rapid Assessment Method (CRAM) and Watershed Evaluation Report (WER) in order to provide context to the determination of mitigation needs.

EPA appreciates the additional discussion of best management practices and low impact development (LID) measures provided in the Storm Water Management Report and recommends that specific LID commitments to be implemented throughout the HSR system be identified in the ROD.

Recommendations for the ROD:

- Identify commitments for LID measures to be used during construction and post construction stages of the project to retain infiltrate and treat stormwater runoff from all features of the HSR project.

3. SPECIAL STATUS SPECIES AND WILDLIFE MOVEMENT

EPA appreciates information added to the FEIS on San Joaquin River crossing design options and predicted impacts, such as impacts on Essential Fish Habitats and special-status fish species. Additionally we appreciate the discussion of Wildlife Crossing structures provided in Section 2.4.2.1 of the FEIS. We encourage CHSRA and FRA to continue to work with resource agencies as designs are further developed to ensure appropriate avoidance, wildlife crossings, and mitigation measures are developed to address project impacts.

Recommendations for the ROD:

- Include a commitment for FRA and CHSRA to continue coordination with Fish and Wildlife Service (FWS) and California Department of Fish and Game (CDFG) throughout the project timeline.
- Commit to specific FWS- and CDFG-approved design measures that: 1) remove wildlife movement barriers, 2) enhance use of wildlife corridors, and 3) provide crossings with suitable habitat, topography, light, and openness to accommodate multiple species, as well as other mitigation measures to address impacts that cannot be avoided.

4. REGIONAL AND LOCAL INDUCED GROWTH, LAND USE, AND PLANNING

EPA is supportive of FRA and CHSRA's vision for HSR station areas that stimulate infill development in city centers, are pedestrian friendly, well connected via multiple transportation options, and provide easy access to goods, services, and jobs. The vision and form of HSR-induced development outlined in the FEIS is only likely to occur if major investments in

planning, changes to land uses, and coordination among housing, transportation, business and many other sectors first take place. We recognize FRA and CHSRA's station-area planning grant program as a critical step toward achieving this vision. We also applaud FRA and CHSRA's strong partnerships with the Cities of Fresno and Merced on HSR station-area planning. Based on information provided in the FEIS, however, we strongly suggest that additional commitments are needed from FRA and CHSRA in the ROD in order to prevent significant unplanned, low-density HSR induced growth. In addition, the public should be informed of the range of potential growth scenarios that could occur to increase awareness of potential outcomes and the importance of local planning decisions.

While EPA is very supportive of FRA and CHSRA's efforts on station-area planning, we again strongly suggest that a parallel planning process to protect against unplanned development is needed at urban edges (i.e. county level) and neighboring communities that are likely to experience HSR induced growth. This parallel process could consist of partnering with local and regional governments, state agencies or non-profit organizations while CHSRA is finalizing design and construction for the HSR project. FRA and CHSRA have already committed to partner with the Department of Conservation to establish and purchase agricultural conservation easements. FRA and CHSRA can maximize the benefits from this effort by working to place easements in areas most at risk from HSR induced growth.

New information added to the FEIS on SB375 and Sustainable Communities Strategies provides a more comprehensive understanding of efforts to achieve well-planned, efficient development patterns that best serve communities. EPA urges FRA and CHSRA to commit to continue to partner with station-cities to support local planning efforts, and to form new partnerships to protect against induced growth at urban edges and neighboring communities. In addition, we encourage commitments to coordinate with local and regional transit agencies to promote connectivity with HSR. While the FEIS appears to assume that HSR stations will attract well-coordinated, relatively denser, infill development, this assumption should be supported with strong commitments, documented and memorialized through the environmental planning process, from FRA and CHSRA.

Recommendations for ROD:

- Discuss the potential uncertainty in future induced growth projections and provide a range of potential impacts that the region could experience, with reference to location, pattern, timing, and intensity of growth. Identify any connections to local planning efforts and the role local decision-making will play in determining the location of future HSR-induced growth (already urbanized areas, adjacent agriculture land, or other greenfields, for example).
- Commit to continued coordination with station cities throughout the design and construction phases of the project to assist with development of planning documents, land use regulations, and municipal policies that encourage higher density, mixed-use, transit-oriented development around stations.
- Commit to coordinate throughout the design and construction phases with non-station communities that may experience development pressure due to access to HSR. Support efforts to develop planning documents, land use regulations, and municipal development policies to inhibit low-density development in these areas.

- Develop and commit to criteria (such as proximity to stations and maintenance facilities) and commit to use the criteria for future identification of agricultural and rural lands most vulnerable to HSR induced growth impacts.
- Commit to working with the California State Department of Conservation and/or local land trusts to facilitate identification of potential conservation areas and support of future easements as a means to mitigate potential unplanned growth patterns.
- Commit to promote and support agricultural land conservation easements for high quality agricultural land most at risk for conversion due to the project as a means to mitigate potential induced growth impacts.
- Commit to collaborate with local transit agencies and transportation authorities to develop transit connectivity plans for HSR station areas and neighboring communities where high HSR ridership is expected. Specifically, commit to coordinate with Fresno Area Express, Merced County Association of Governments, and Yosemite Area Regional Transportation System.
- In order to achieve stations that are multi-modal hubs, commit to:
 - Partner with local and regional transportation agencies to facilitate easy transfers between transit and HSR, such as shared ticketing and wayfinding.
 - Design stations to be pedestrian and bicycle-friendly by incorporating features such as bike lockers, changing rooms, and showers.
 - Coordinate with car share organizations and promoting use of shared vehicles at HSR stations to provide an additional alternative to private car use.
 - Work with local jurisdictions on planning for parking and following the Urban Design Guidelines (prepared by CHSRA) and best practices.
 - Minimize the number of parking spaces to the greatest extent possible at stations in order to facilitate the use of transit, construct multi-level parking structures as opposed to large expansive parking lots, and promote programs to phase down the number of parking spaces over time.
 - Avoid surrounding HSR stations with parking lots and creating a barrier effect (as depicted in Figure 2-42b if the FEIS).
- Commit to augmenting CHSRA's "HSR Station Area Development: General Principles and Guidelines" document and "Urban Design Guidelines" document so that they include equity, and guidelines for promoting equity, as a key principle.
- Commit to working with cities and other stakeholders to help promote the integration of an appropriate percentage of low-income housing into station-area developments. The Response to Comments states that low-income housing will be addressed by other entities.

5. ENVIRONMENTAL JUSTICE AND COMMUNITY IMPACTS

EPA appreciates the revisions to the environmental justice analysis, including the addition of a clearly defined reference community, following EPA's comments on the DEIS. We recommend further disclosure of information and additional commitments in order to more fully address environmental justice and community impacts. This information may also help address issues related to compliance with Title VI of Civil Rights for CHSRA as recipient of federal funds.

Recommendations for ROD:

- Revisit conclusions regarding whether disproportionate impacts would occur for the categories where the FEIS states that disproportionate impacts would not occur because impacts would be the same among all populations. Since nearly all populations in the project area are communities of concern, it seems that all populations being affected the same might also mean that “impacts would be predominately borne by communities of concern.” This would fulfill FRA and CHSRA’s stated criteria for defining disproportionate impacts. Include any changes to conclusions regarding environmental justice impacts along with mitigation in the ROD.
- Provide estimates of the duration of construction activities that would take place within each potentially impacted community.
- In order to more fully disclose impacts, include a table that displays residential and business displacements “by community” and then totaled for each alternative, following the example of Table 3.12-9 from the Fresno to Bakersfield DEIS.
- Augment MM-SO#2 to commit to focusing business relocation efforts of neighborhood-serving businesses within their existing neighborhoods to minimize impacts to community cohesion to the extent possible and when properly zoned parcels are available or can be made available.
- Commit to conducting community workshops in all significantly affected areas to obtain input and identify mitigation measures for residents whose property would not be taken, but whose community would be substantially altered by construction of HSR facilities, including loss of neighbors. Follow the example of commitments made for the areas northeast of Hanford and Corcoran on page 3.12-83 of the Fresno to Bakersfield DEIS.

6. HEAVY MAINTENANCE FACILITY

EPA understands that analysis and decisions related to the final siting of the Heavy Maintenance Facility (HMF) will be included in the San Jose to Merced environmental review process. Please consider the following when assessing HMF siting.

Recommendations for the ROD:

- Response to Comments states that HMFs will be assessed in a future environmental document. In the ROD, clarify which document will assess HMFs, how public input will be gathered, and how a decision will be made.
- Commit to the consideration of significant impacts to sensitive receptors in the future analysis and selection of the HMF site.
- Include as a criteria in the decision-making for siting the HMF the estimated cancer risk and the Respiratory Hazard Index.

7. COMPENSATION FOR IMPACTS TO AGRICULTURAL IMPACTS

As FRA and CHSRA are finalizing the strategy for compensating for the loss of farmland and farming operations, EPA suggests that the methodology be tailored to address specific agricultural issues.

Recommendations for ROD:

- Include a robust description of the compensation strategy that will be used for farmland, including, 1) how it was developed; 2) how it calculates the present value of lost future earnings; 3) how it assesses the decreased efficiency of operations on remaining land (e.g. due to smaller field sizes, etc.); and 4) assumptions used regarding land staying in the same cropping system and/or changing to systems more amenable to smaller sites, such as truck farming for local consumption.
- In the description of the compensation strategy, include a land valuation methodology that accurately assesses which parcels will be deemed “non-economic”, including 1) assumptions for analysis; 2) source of data used; 3) factors that were considered (beyond connectivity to other farmland, as stated); and 4) the specific role of agricultural specialists in making determinations.

8. ENERGY

EPA supports CHSRA’s commitment to 100% renewable energy and facilities with net-zero energy usage, as well as the addition of text to the FEIS describing CHSRA’s ongoing partnership with National Renewable Energy Laboratory and EPA on developing a renewable energy strategy.

Recommendations for ROD:

- Commit to promote siting of renewable energy infrastructure on contaminated and underutilized lands over pristine lands if FRA and CHSRA have a role in influencing where the source of energy for powering the trains will come from. RE-Powering America’s Lands Initiative has a mapping tool that allows users to see contaminated lands by location (http://www.epa.gov/renewableenergyland/mapping_tool.htm.)
- Commit to coordinate with local farming stakeholders to consider linking farming with the need to secure renewable energy to power the project. For example, coordinated site of wind turbines, bio-digesters, and other technologies might benefit both farmers and the CHSRA.

9. CUMULATIVE IMPACTS - CHARACTERIZATION OF SIGNIFICANCE

EPA appreciates changes made to the FEIS in the “NEPA Impacts Summary” sections of Sections 3.12 through 3.18. These sections now clearly indicate whether impacts would be considered significant under NEPA. Although the Response to Comments states that Section 3.19 has also been revised, significance determinations do not appear to be included for cumulative impacts.

Recommendation for ROD:

- Provide a summary identifying whether the anticipated cumulative impacts of the proposed project are significant, as defined by Council on Environmental Quality in 40 CFR Part 1508.27.

10. SUSTAINABILITY PARTNERSHIP, POLICIES, AND PRACTICES

EPA recognizes the many ongoing efforts by FRA and CHSRA to achieve an environmentally sustainable HSR system, including partnering with EPA and others to promote best practices.

We note that several of our comments were addressed in the Response to Comments (response #774-26); however, those responses were not included as commitments in the FEIS. We recommend that all commitments identified in the Response to Comments be included in the ROD. In addition, as applicable, include the following commitments as elements of the Environmental Management System or relevant guidance documents.

Recommendations for ROD:

- Commit to continue to work with the HUD/DOT/EPA Partnership for Sustainable Communities and the State of California Strategic Growth Council under the *Memorandum of Understanding for Achieving an Environmentally Sustainable High-Speed Train System in California* (Sustainability MOU).
- Commit to implement an Environmental Management System (EMS). The Response to Comments (response #774-26) states that an EMS will be implemented, but a commitment does not appear to be in the environmental document.
- Commit to incorporate specific language on preferred qualifications and practices in Request for Qualifications and Request for Proposals to help ensure that contractors have the necessary expertise and develop appropriate proposals to design, construct, and operate the HSR system in a sustainable manner, in line with CHSRA's stated goals. EPA appreciates that the Response to Comments states that this is being addressed (response #774-26). It does not, however, appear to be included in the FEIS.
- Commit to analyze the strengths and feasibility of obtaining LEED certification at the Platinum Level for HSR facilities, including stations and maintenance facilities.
- Commit to exceed CALGreen standards in priority areas by meeting "optional" standards, including: pollutant control, indoor air quality, renewable energy, energy and water conservation, low impact development, and designated parking for fuel efficient/electric vehicles.
- Commit to provide information on green building practices when working with local jurisdictions on station-area development. In addition, encouraging third party certification (such as LEED for Homes and Build it Green) and goals to exceed CALGreen requirements by meeting "optional" standards.
- Commit to provide technical assistance for green building in station areas. Incorporate green building principles into FRA and CHSRA's ongoing grant program to support station-area development and related guidance documents (i.e. Urban Design Guidelines).
- Commit to encourage and assist local jurisdictions in designing for adaptability and reuse in station areas to increase flexibility to meet future community needs. This is especially critical for any parking features which may become unnecessary after transit connectivity is developed. For guidance, see Public Architecture, Design for Reuse Primer, <http://www.publicarchitecture.org/reuse/>, and Lifecycle Building Challenge Resources, <http://www.lifecyclebuilding.org/resources.php>.
- Commit to work with local jurisdictions to obtain LEED for Neighborhood Development (LEED-ND) Certification for station areas. LEED-ND certification provides independent, third-party verification that a building or neighborhood development project is located and designed to meet high levels of environmentally responsible, sustainable development.

11. CONSISTENCY ACROSS HSR PROJECT SECTIONS

Through our concurrent review of separate environmental documents for Merced to Fresno and Fresno to Bakersfield HSR sections, EPA identified impact categories where methodologies for analysis appear to vary. While regional differences will require adjustments to impact methodologies, EPA continues to recommend consistency in the analysis when applied to various HSR Project Sections. Sections where inconsistencies were noted include hazardous materials, HMF operational noise, cumulative noise impacts, and environmental justice.

Recommendations for the ROD:

- Confirm that methodologies and resulting conclusions and decision-making processes are being applied consistently across the multiple HSR sections. EPA is available to assist with reviewing template methodologies upfront to increase efficiency of the overall environmental review process.

From: Kohlstrand , Rebecca <Kohlstrand@pbworld.com>
Sent: Tuesday, April 3, 2012 8:09 PM
To: Valentine, Peter <Valentine@pbworld.com>
Cc: Popoff, John <popoff.john@pbworld.com>; Porter, Bryan <Porter@pbworld.com>; Karin.Lilienbecker@ch2m.com; McLoughlin, Mark <MMcLoughlin@icfi.com>
Subject: RE: MF Swainson Hawk Surveys - CDFG 2081 Permit

Peter,

While we are still waiting for the budget estimate and scope, I support undertaking this activity now to ensure that we continue to advance all of the survey work that is required to avoid delays in the 2081 Mitigation Take permit. I support Mark's efforts to coordinate all of the permitting activity to the extent that we can in an effort to save mitigation dollars during construction. By conducting these protocol surveys now, as has already been done for the Fresno Bakersfield section, we can potentially avoid an over mitigation of the impacts resulting from our current "assume presence" stance in MF. I think that we should be relying on our experts in the field, at the agencies, and here at the Authority to determine when the appropriate time is to undertake the surveys. As John offered yesterday, I would like to get approval on this promptly given the current nesting season. Thanks.

Rebecca

From: McLoughlin, Mark [mailto:MMcLoughlin@icfi.com]
Sent: Tuesday, April 03, 2012 6:06 PM
To: Kohlstrand , Rebecca
Cc: Valentine, Peter; Popoff, John; Porter, Bryan; Karin.Lilienbecker@ch2m.com
Subject: MF Swainson Hawk Surveys - CDFG 2081 Permit

Hi Rebecca,

From your request to the PMT, I am expecting in the morning, a Scope and Budget for Swainson Hawk Surveys for the full segment of the Merced to Fresno, including CP1.

As Karin previously explained below from the Biology Team, I am requesting these Protocol Surveys to advance the discussion of the Mitigation for the 2081 Take Permit from CDFG under the California Endangered Species Act.

These are Protocol level Surveys to determine a baseline of activity for Swainson Hawk, to date these have not been performed for MF.

In our discussions with CDFG in this area, nesting and breeding activity is currently underway, and now is the right time to perform these Surveys. If we miss this window of opportunity, we will not have the opportunity to have a legitimate conversation with CDFG.

There may be some confusion as these are not Pre-Construction Surveys. We will be required to perform these next Spring before the commencement of Construction.

And, these Protocol Surveys are not required for the NOD/ROD for MF, but for our imminent Permitting requirements.

With this baseline, we can begin discussion with CDFG on the level of Mitigation required. Again, if we do not have these we have to be conservative in our approach to the acreage for Mitigation, which can be substantial.

In addition, we have made strides on the relationships with CDFG and USFWS to provide them with logical, required, information for them to make decisions for the BO, and the 2081. These Surveys will serve this purpose.

As I am focused on the immediate needs for Mitigation for the Project, our relationship with the Agencies to provide them sound Biological information. I want this to be consistent with FB also, as I am looking at Properties to satisfy the current and future needs of the Project.

Let me know if you need further clarification or additional information.

- *The mitigation requirements are based on distance of nesting trees from an effect that disturbs Swainson's hawks (e.g., noise). Using habitat estimates is a surrogate for surveys.*
- *Currently, Swainson's hawk impacts for MF are based only on habitat (e.g., meadows, grain fields). Along the ICS, the project would convert approximately 310 acres and impact an additional 2,600 acres (approximately) near the alignment, resulting in a potential total mitigation requirement of approximately 3,000 acres.*
- *Spring is the nesting season. If surveys are conducted this spring, then the mitigation requirement could be reduced to 1 or 2 nesting sites for the ICS. Total acreage to be mitigated would then be less than 3,000 acres (and lower project costs).*
- *Furthermore, if surveys are not conducted this spring, then either they would need to be conducted in the spring of 2013 (which is too late to obtain a permit by the construction start date) or the Authority would need to mitigate approximately 3,000 acres of impacted habitat, as explained above.*

Furthermore, Swainson's hawk surveys can be conducted without needing to access private property. Observations can be made with binoculars from publically accessible roads to the extent the alignment and areas up to 0.5 miles from the alignment can be viewed. Because of the 1-season surveys, potential for reduction in mitigation acreage, and ability to conduct surveys without accessing private property.

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SOCIOECONOMICS, COMMUNITIES, & ENVIRONMENTAL JUSTICE

In our October 2012 response to the Revised Draft EIR/Supplemental Draft EIS for the Fresno to Bakersfield Section of the proposed California High-Speed Train System, we submitted 60 questions. It was disconcerting that more than half (31) were answered with generic or vague answers and/or redirected you to several different report sections and documents. In addition, the lack of detailed discussion of the impacts, the lack of coordination with the EJ community, inadequate mitigation measures, and the primary concentration on the urban areas [Fresno and Bakersfield] and neglect of the more rural communities was a significant issue in not engaging an appropriate cross-section of affected communities.

Response	Primary Objection(s)
BO101-3 COMMUNICATION WITH THE EJ COMMUNITY	The Environmental Justice [EJ] community has little experience with the CEQA/NEPA process, and the Final EIR/EIS document becomes another obstacle to understanding the potential impacts of the HST project on their community. Providing the document in Spanish would likely not alleviate these problems. The problem is the basic structure of the documents. The Authority taking the position that they are consistent with requirements does not answer how they will address this issue and communicate with the EJ community.
BO101-6 ACCESS TO CREDIT	There has been a huge change in the ability of lower income persons to obtain credit and housing loans since many of the existing residents acquired their current homes. Having to go to several different sections and documents makes it difficult to understand the total impacts of this project on the EJ community.
BO101-7 IMPACTS TO BUSINESS	Again, having to go to several different sections and documents makes it difficult to understand the total impacts of this project on the EJ community.
BO101-17 CHANGES IN SCHOOL DISTRICT FUNDING	It is impossible to understand what is being said in this section.
BO101-21 THE LIST OF SIGNIFICANT IMPACTS	<ul style="list-style-type: none"> • The loss of jobs; • The inability to readily find new jobs due to the lack of needed skills or language ability; and • The inability to use the project once completed to service local needs <p>The Authority states "jobs created by construction and operation of the project would likely be filled by workers in the region." The Authority does not address the new skills needed or language ability for these likely jobs.</p>

SOCIOECONOMICS, COMMUNITIES, & ENVIRONMENTAL JUSTICE

Response	Primary Objection(s)
BO101-23 PUBLIC OUTREACH	What the Authority clearly did not do was widely utilize the most important communication media for the EJ community – radio. The Authority did not mention that they utilized – radio in the FEIR/EIS.
BO101-30 HOMELESS COMMUNITY	The Authority did not address the homeless community in Fresno. A more complete discussion of the homeless community in Fresno needs to be provided.
BO101-42 AIR QUALITY	According to a recent <i>Los Angeles Times</i> Article the new Cal/EPA map shows Fresno contains eight of the 10 areas most burdened by pollution ¹ . Since Fresno ranks No. 1 on California’s pollution list a summary of the findings from the Air Quality Section needs to be provided in this section.
BO101-46 ECONOMIC EFFECTS	While there may be some improved accessibility to labor and customer markets in the region, the real benefit appears to be increased access between the major markets – Los Angeles and San Francisco. We asked three questions on this topic – 1) Have there been any studies on potential local ridership, especially by the EJ community? 2) Will this project benefit them and if so, how? 3) What will be the impact on properties along the project alignment that are not near the HST stations? None of them were answered in the Final EIR/EIS.
BO101-48 EMPLOYMENT GAINS	Again, the loss of jobs; the inability to readily find new jobs due to the lack of needed skills or language ability; and the inability to use the project once completed to service local needs. The Authority states “jobs created by construction and operation of the project would likely be filled by workers in the region.”

¹ See, e.g., Attachment A, Los Angeles Times, *Fresno ranks No. 1 on California pollution list*, April 24, 2014.

SOCIOECONOMICS, COMMUNITIES, & ENVIRONMENTAL JUSTICE

Response	Primary Objection(s)
BO101-50 AGRICULTURAL JOB LOSS	<p>"The Community Impact Assessment Technical Report provides analysis in the appendix the results by county and by project alternative in terms of the number of acres of agricultural production loss, the resulting annual revenue loss in both dollar and percentage terms for each type of agricultural product, and the employment loss."</p> <p>An analysis of the agricultural workforce is needed to understand the magnitude of this job loss on the EJ community. Also, the ability to get to work may be impacted by the project, due to road closures, and needs to be assessed.</p>

SOCIOECONOMICS, COMMUNITIES, & ENVIRONMENTAL JUSTICE

Response	Primary Objection(s)
BO101-54 MITIGATION MEASURE SO-1	This mitigation describes a program that will be developed in the future to reduce impacts associated with the division of existing rural residential communities. Because the program still needs to be developed, there is no way to determine its adequacy. Again, this kind of "deferral" of a required mitigation is inadequate.
BO101-55 MITIGATION MEASURE SO-2	This mitigation describes a program that will be developed in the future to reduce impacts associated with the division of existing communities in the Bakersfield Northeast District. Because the program still needs to be developed, there is no way to determine its adequacy. This kind of "deferral" of a required mitigation is inadequate.
BO101-56 MITIGATION MEASURE SO-3	This mitigation describes a program that will be developed in the future to reduce impacts associated with the division of existing communities in the Bakersfield Northwest District. Because the program still needs to be developed, there is no way to determine its adequacy. This kind of "deferral" of a required mitigation is inadequate.
BO101-57 MITIGATION MEASURE SO-4	This mitigation describes a program that will be developed in the future to reduce impacts associated with the impacts associated with the relocation of important facilities. Because the program still needs to be developed, there is no way to determine its adequacy. This kind of "deferral" of a required mitigation is inadequate. In addition, the measure does not include the Fresno Rescue Mission or the Mercado Latino Tianguis. These two facilities also need to be included.
BO101-58 MITIGATION MEASURE SO-5	This mitigation measure describes providing access modification to affected farmlands. No access plan has in fact been developed. The timing of these access modifications needs to be described. As with the other mitigation measures, it is not possible to assess if this mitigation measure is adequate, and this kind of "deferral" of a required mitigation is inadequate.

SOCIOECONOMICS, COMMUNITIES, & ENVIRONMENTAL JUSTICE

Response	Primary Objection(s)
BO101-59 MITIGATION MEASURE SO-6	The program for continued outreach to disproportionately and negatively impacted EJ communities of concern needs to be developed and fully reviewed. No plan has been developed. Based on previous outreach, much additional work would be required to develop an adequate plan. Like the other mitigation measures, it is not possible to assess if this mitigation measure is adequate; and this kind of “deferral” of a required mitigation is inadequate.
BO101-60 MITIGATION MEASURE SO-7	Again, it is impossible to assess the adequacy of this mitigation measure to minimize the potential for physical deterioration. No program has been developed, and this kind of “deferral” of a required mitigation is inadequate.

SOCIOECONOMICS, COMMUNITIES, & ENVIRONMENTAL JUSTICE

ATTACHMENT A

4/24/2014

Fresno ranks No. 1 on California pollution list - latimes.com

latimes.com/local/la-me-fresno-pollution-20140424,0,5860295.story

latimes.com

Fresno ranks No. 1 on California pollution list

New Cal/EPA maps show that Fresno contains eight of the 10 areas most heavily burdened by pollution. But the data tell just part of the story.

By Diana Marcum

6:50 PM PDT, April 23, 2014

FRESNO — The state's new effort to map the areas most at risk from pollution features hot spots advertisement up and down California.

But nowhere are there more of the worst-afflicted areas than in Fresno — in particular a 3,000-person tract of the city's west side where diesel exhaust, tainted water, pesticides and poverty conspire to make it No. 1 on California's toxic hit list.

"I'm looking at this map, and all I see is red. We're right here," Daisy Perez, a social worker at the Cecil C. Hinton Community Center, said as she located the center of the red areas that represented the top 10% most-polluted census tracts in California. "It's so sad. Good people live here."

Pollution has long plagued the Central Valley, where agriculture, topography and poverty have thwarted efforts to clean the air and water. The maps released this week by the California Environmental Protection Agency show that eight of the state's 10 census tracts most heavily burdened by pollution are in Fresno.

For residents of the state's worst-scoring area, statistics tell only part of the story of what it is like to live there.

It's a place where agriculture meets industry, crisscrossed by freeways. The city placed its dumps and meat-rendering plants there decades ago.

Historically, it was the heart of the city's African American community. The Central Valley's civil rights movement was centered in its churches. People referred to it as West Fresno, which meant a culture as well as a place.

These days, young community workers call it by its ZIP Code — the "93706 Zone."

It's home to a Latino community — the children and grandchildren of migrant workers; to Hmong and Cambodian farmers; and to a minority African American community that includes those desperate to leave, and an old guard of those who say they will never abandon home.

"The voice of the community is still black. Because we're the ones who now have the wherewithal and time to speak," said Jim Akdredge, who took over running the community center when the city cut its budget. "Look, when you're just trying to survive, you don't have time to go before City Council and all that. Pollution data is the

<http://www.latimes.com/local/la-me-fresno-pollution-20140424,0,6305462.print.story>

1/3

SOCIOECONOMICS, COMMUNITIES, & ENVIRONMENTAL JUSTICE

4/24/2014

Fresno ranks No. 1 on California pollution list - latimes.com

farthest thing from your mind when you're looking for your next meal."

Aldredge grew up in West Fresno and worked in city government for 20 years, once as city manager. He can point out better than most the stories literally buried beneath the landscape.

There's the grassy hill — just a mound, really — that constitutes Hyde Park, which was once a dump. Not a landfill, but an old-time dump where people took trash and tires to be burned.

The city is careful to keep the grass green on top of the mound, and a study done before building started on the new junior high school found the land no longer contaminated by chemicals that had seeped into the ground.

Across the street is an animal rendering plant, a chicken plant and an electric substation.

In front of the plants are fields of strawberries, giving way to orchards of pistachio and fruit trees.

This area ranks in the 90th percentile for pesticide applications, according to the state.

"But we don't talk about the pesticides," Aldredge said. "The agricultural folks are so strong."

On Tuesday, a bright blue day, a breeze kicked up dust devils in a wide open field of dirt across the street from a housing tract.

This was where Donald Trump once planned to build a golf course designed by Jack Nicklaus, surrounded by country club homes. Now it is dust. Fine particulate matter is one of the leading causes of air pollution in Fresno during the winter months.

The most controversial industry in the area is the Darling International meat processing plant.

A vocal group of residents led by Mary Curry, who lives downwind from the stench, maintains a strong public outcry.

According to the CalEPA data, the nearby Cargill rendering plant actually releases more pollutants into the air than the Darling plant.

But there is no organized push against this plant, which sits near the intersection of two freeways in the census tract, known as Edison, with the most health risks in all of California.

The new data — the first of its kind in the country — looks at a community's level of education and ability to communicate with the power structure as well as environmental factors.

When Aldredge was a teenager — a standout baseball player intent on leaving West Fresno behind — he would walk by tallow plants with dead horses and cows outside and a slaughterhouse that always smelled.

"I don't know that I even knew different," he said. "It was just the way things were."

On Tuesdays, when the community center gives out food, part of Daisy Perez's work is to ask residents what they like about their neighborhood and what bothers them.

"They always say that they like that it's quiet. People like the country feel and the community feel," she said. "But

SOCIOECONOMICS, COMMUNITIES, & ENVIRONMENTAL JUSTICE

4/24/2014

Fresno ranks No. 1 on California pollution list - latimes.com

they always complain about headaches, especially when the wind blows. They think it's the smell from the meat plants or maybe the pesticides."

A breeze carried a smell from a meat rendering plant. Perez said she found it a choking stench and had to fight a gag reflex.

Shakur Tyson, 14, who goes to school and works at the center, said at first he didn't smell anything.

Then he said he was starting to notice a bit of a smell.

"I'm just used to it. I guess," he said. "It's the way things are."

diana.marcum@latimes.com

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**Analysis and Critique of the California High Speed Rail Authority's
Responses to Comments on the Revised Draft EIR/Supplemental EIS for
the Fresno-to-Bakersfield Segment of the California High-Speed Train**

prepared for

Citizens for California High Speed Rail Accountability

prepared by

Joel Schwartz

Blue Sky Consulting Group

May 5, 2014

This document presents our analysis and critique of the California High Speed Rail Authority's (CAHSRA) responses to comments we submitted¹ on the Revised Draft EIR/Supplemental Draft EIS² for the Fresno to Bakersfield Segment of the California High Speed Train project (HST).

CAHSRA Responses BO027-1, BO027-2: Errors in assumed increases in automobile fuel economy result in overestimated CO₂ reduction benefits from High-Speed Rail

In the DEIR/DEIS, the CAHSRA estimated that the California HST would reduce statewide CO₂ emissions by 5.3 million to 6.3 million metric tons per year due to reductions in automobile vehicle miles traveled (VMT).³ In our comments on the DEIR/DEIS, we showed that CAHSRA overstated these reductions by effectively assuming little or no improvement in automobile fuel economy between 2012 and 2035.

In response, in the Final EIR/EIS (FEIR/FEIS), CAHSRA has revised its forecast of CO₂ emissions benefits due to reduced VMT downward to between 1.9 million and 2.8 million metric tons per year,⁴ or a 67% reduction in predicted CO₂ benefits (based on a comparison of the mid-range values from the DEIR/DEIS and FEIR/FEIS).

According to CAHSRA's response, the large decrease in the predicted CO₂ benefits of high speed rail (HSR) is due to switching from EMFAC2007 to EMFAC2011 for CO₂ emissions estimation. EMFAC2011 incorporates vehicle fuel economy standards adopted in 2010, while EMFAC2007 does not. CAHSRA points out, however, that EMFAC2011 does not incorporate the even-more-stringent fuel economy standards adopted in 2012. The 2010 standards required an average fuel economy of 35 mpg from 2015 onward. The 2012 standards require average fuel economy to rise from 35 mpg to 54.5 mpg between 2015 and 2025. Thus, the 2012 standards require a much greater improvement in fuel economy, but the FEIR/FEIS does not include the effect of these requirements on HSR's potential CO₂ benefits.

Thus, while the FEIR/FEIS range of 1.9 million to 2.8 million tons per year of CO₂ reductions is more realistic⁵ than the DEIR/DEIS range of 5.3 million to 6.3 million tons per year, the FEIR/FEIS should make explicit the fact that this is still an overestimate and that

¹ Joel Schwartz, *Comments submitted to the California High Speed Rail Authority on the Revised Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement for the Fresno-Bakersfield Segment of the California High Speed Train project*, prepared for Wittwer & Parkin, LLP, October 16, 2012.

² For brevity, we will refer to the Revised Draft EIR/Supplemental Draft EIS as the DEIR/DEIS.

³ DEIR/DEIS Table 3.3-15, p. 3.3-60.

⁴ FEIR/FEIS Table 3.3-15, p. 3.3-66.

⁵ More "realistic" in the sense that it is based on higher mpg values that are closer to actual requirements for future vehicles. However, it is important to note, as we pointed out in our comments, that CAHSRA also overstated the number of motorists likely to switch from driving to HSR (more on this below), causing an overestimate of future VMT reductions due to HSR. Thus, even though CAHSRA has improved its estimates of CO₂ benefits from HSR by using a more realistic fuel economy for future automobiles, it has still not addressed the overestimate of HSR's CO₂ benefits due to its overestimate of likely HSR ridership.

actual reductions in CO₂ will be significantly lower than this once EMFAC transitions from the 2010 fuel economy standards to the much-more-stringent 2012 standards.

Because EMFAC2011 is known to understate future improvements in automobile fuel economy, and therefore overstate the CO₂ benefits of HSR, CAHSRA has an obligation to provide a more realistic estimate of CO₂ benefits based on actual fuel economy requirements, rather than EMFAC2011's incorrect values. Providing realistic estimates of the CO₂ benefits from operation of HSR will help the public determine whether these environmental benefits are large enough to warrant the significant environmental impacts the public will have to bear during HSR construction.

The fact that EPA's and CARB's emissions model approval process does not keep up with real-world developments in vehicle fuel economy does not excuse CASHRA from its obligation to provide forecasts of HSR's CO₂ benefits that are based on actual fuel economy requirements for future automobiles. Deriving realistic CO₂ benefits that account for the most up-to-date fuel economy requirements is a relatively simple undertaking, requiring only that CAHSRA apply the 2012 fuel economy standards for future automobiles to the VMT reductions (due to HSR implementation) that it has already derived from its ridership modeling efforts. By using the outdated assumptions in the EMFAC2011 model, the FEIR/S overstates the CO₂ reduction benefits of the Project.

CAHSRA Response BO027-3: Nonresponse to comment concerning overestimated ridership.

Our comment pointed out that CAHSRA assumed too high a marginal cost of driving in its ridership modeling and that this caused an overestimate of HSR ridership by making HSR appear more competitive with the automobile than will actually be the case. However, CASHRA simply repeated its response to comments BO027-1 and BO027-2 regarding future automobile fuel economy and HSR CO₂ benefits. CAHSRA's response does not in any way respond to our actual comments. Furthermore, the FEIR/FEIS continues to suffer from the same deficiencies as the DEIR/DEIS.

CAHSRA based its HSR forecasts in the DEIR/DEIS and 2012 Business Plan on a mid-range assumption that the marginal cost of driving will be 24 ¢/mile in 2030 (in 2011 dollars) of which 10.3 ¢/mile was non-fuel costs (maintenance and tire wear). According to the Draft 2014 Business Plan, CAHSRA is now assuming that driving will cost 19 to 28 ¢/mile in 2029 and 18 to 28 ¢/mile in 2040 (in 2013 dollars).⁶ The 2014 Business Plan relies on the assumption that ultimately, by 2040, the cost of driving will more than double. Taking the middle of these two ranges gives a marginal cost of driving of about 23 ¢/mile. This includes 9 ¢/mile for non-fuel costs. Thus, the FEIR/FEIS and DEIR/DEIS use roughly the same assumptions about the future cost of driving.

We pointed out in our comments on the DEIR/DEIS that this value is too high for a number of reasons.

⁶ Cambridge Systematics, California High-Speed Rail Draft 2014 Business Plan Ridership and Revenue Forecasting—Draft Technical Memorandum, February 6, 2014, p. 4-4.

- CAHSRA's own consultant, Parsons Brinkerhoff, cites a value of 5 ¢/mile for non-fuel costs, or about half the value used in CAHSRA's HSR modeling.⁷
- Another CAHSRA consultant, Cambridge Systematics, argues that motorists do not even take account of non-fuel costs when deciding whether to travel by car.⁸
- CAHSRA's assumption of 14 ¢/mile for the marginal cost of gasoline in 2030 and 2040 translates into an automobile fuel economy of 27.4 mpg and 32.7 mpg in 2030 and 2040, respectively (assuming \$3.83 and \$4.58 per gallon for gasoline in 2030 and 2040, respectively).⁹ But recall that fleet-average fuel economy for cars sold from 2015 to 2025 will rise from 35 to 54.5 mpg and remain at least at 54.5 mpg from 2025 onward. Furthermore, as we showed in our comments, HSR will displace mainly highway driving by newer-than-average cars. That is, HSR will displace the most fuel-efficient cars and the most fuel-efficient driving mode. CAHSRA's assumption of 27 and 33 mpg for the average car in 2030 and 2040 is thus extraordinarily farfetched. At a more plausible (but still conservative) 40 and 45 mpg for the driving displaced by HSR in 2030 and 2040, the cost of gasoline would be 9.6 ¢/mile and 10.2 ¢/mile, respectively (once again, using CAHSRA's assumptions of \$3.83/gallon in 2030 and \$4.58/gallon in 2040).

In other words, rather than the 24 ¢/mile assumed by CAHSRA, a more realistic marginal cost of driving, based solely on the conclusions of its own consultants and a realistic average fuel economy for future automobiles, is somewhere between 10 and 15 ¢/mile, depending on whether motorists take account of non-fuel costs when deciding whether to travel by car.

CAHSRA's assumption of 24 ¢/mile for the marginal cost of driving is at odds with its own consultants' conclusions and at odds with the plain realities of federal and California fuel economy requirements. This implausibly high marginal cost of driving causes CAHSRA to overstate ridership, and therefore CO₂, air pollution, and road congestion benefits of HSR by making HSR appear more competitive with the automobile than will actually be the case. Providing realistic estimates of the CO₂, air pollution, and transportation benefits from operation of HSR will help the public determine whether these benefits are large enough to warrant the significant environmental impacts the public will have to bear during HSR construction.

⁷ Gary Barnes and Peter Langworthy, *The Per-mile Costs of Operating Automobiles and Trucks*, prepared for the Minnesota Department of Transportation (University of Minnesota, Humphrey Institute for Public Affairs, 2003), cited by Parsons Brinkerhoff, *California High-Speed Rail Benefit-Cost Analysis (BCA)*, prepared for the California High Speed Rail Authority, April 2012.

⁸ Cambridge Systematics, *Desert Xpress Ridership Forecast Review*, prepared for Circle Point, February 29, 2008, p. 17.

⁹ For example, \$3.83/gallon divided by 14 ¢/mile = 27.4 miles/gallon. CAHSRA's cost-of-gasoline assumptions for future years can be found in Parson-Brinkerhoff, *2014 California High-Speed Rail Benefit-Cost Analysis*, February 2014, p. 8.

CAHSRA Response B0027-4: Real-world French TGV experience indicates that CAHSRA's forecasts overstate likely ridership and revenue.

CAHSRA implies that we claimed CAHSRA's ridership and revenue modeling should "use the costs of auto travel in France as the basis for its projections" and "integrate the French TGV into its assumptions." In fact, our comments pointed out that the French TGV provides a real-world test of the validity of CAHSRA's modeling assumptions regarding HSR in California, acting as an external test of the validity of CAHSRA's HSR ridership and revenue forecasts. We showed that CAHSRA's ridership and revenue forecasts failed this test.

Based on its mischaracterization of our comments, CAHSRA concludes "The commenter's reference to French auto travel and TGV data are not relevant to the HST project's ridership projections." By mischaracterizing our comments, CAHSRA avoided responding to our actual comments.

External tests of validity are an essential component of forecast validation, yet CAHSRA failed to compare its forecasting assumptions and results regarding HSR's ability to attract drivers against actual real-world experience in other locations that have implemented HSR. Such comparisons with real-world results for similar projects are essential because in nearly all rail projects, forecasted ridership has been far higher than actual ridership.¹⁰ The French TGV experience is highly relevant for this type of external forecast validation for the following reasons:

- France opened new TGV lines along routes that previously did not have them, providing a test of HSR's ability to attract riders who previously traveled by car, air, or rail.
- Both the absolute cost of driving and the cost of driving relative to HSR is much higher in France than in California. Therefore, the TGV would be expected to have an easier time attracting drivers when compared with HSR in California.

Nevertheless, the TGV in fact attracted the vast majority of its riders from slower rail lines and from air travel, and only 6% of all riders were former drivers. Even when limiting the analysis solely to air travelers and motorists, only 40% to 45% of TGV riders were former drivers, while 55% to 60% were former air travelers. In contrast, CAHSRA predicts that 74% of all California HSR riders will be former motorists and 26% will be former air travelers, despite the fact that California HSR will be less cost-competitive with the automobile when compared with the French TGV. This suggests that CAHSRA's HSR ridership modeling is unrealistic and overstates likely HSR ridership in California. If so, then the CO₂, air pollution, and road congestion benefits of HSR are overestimated. Providing realistic estimates of the CO₂, air pollution and transportation benefits from operation of HSR will help the public determine whether these benefits are large enough to warrant the significant environmental impacts the public will have to bear during HSR

¹⁰ B. Flyvbjerg, M. K. Skamris Holm & S. L. Buhl, "How (in)accurate are demand forecasts in public works projects?: The case of transportation," *Journal of the American Planning Association*, 71(2), 131-146. "For more than 9 out of 10 rail projects, passenger forecasts are overestimated...Rail passenger forecasts were overestimated by an average of 105.6%," p. 133.

construction. Rather than mischaracterizing and sidestepping our comments, CASHRA should identify the explicit and implicit modeling assumptions and input data that are causing its models to produce unrealistically optimistic forecasts of HSR ridership.

CAHSRA Response BO027-5: Underestimated fuel economy for aircraft results in overestimated benefit of HSR in comparison to air travel.

In our comments on the DEIR/DEIS, we showed that CAHSRA assumed too low a value for aircraft fuel efficiency in future years. In response, CAHSRA stated “the analysis has been updated to reflect aircraft emission rates as estimated in FAA’s Emission and Dispersion Modeling System (EDMS).” Notwithstanding this claim, CAHSRA is still assuming an aircraft fleet efficiency for 2035 that is already being achieved by the current aircraft fleet.

As discussed in our comments, in its 2012 Business Plan CAHSRA assumed that aircraft fleet fuel economy would improve from 62.3 seat-miles per gallon in 2011 to 68.9 seat-miles per gallon in 2035.¹¹ The Draft 2014 Business Plan uses the same assumption for 2011 and assumes 67 seat-miles/gallon in 2030 and 71.5 seat-miles/gallon in 2040 (which, by linear interpolation, is 69.3 seat-miles/gallon in 2035). In other words, CAHSRA is using essentially the same values today as when the DEIR/DEIS was released, despite its claims that it has updated its analysis.

As we noted in our comments, Southwest Airlines, a major California carrier along the routes planned for HSR, had already achieved 68.6 seat-miles/gallon by 2010. United Airlines, another major California carrier, had achieved 66 seat-miles/gallon by 2011. In other words, California’s major air carriers have already surpassed, by 6% to 11%, respectively, the fuel efficiencies that CAHSRA assumed for 2011 and have already nearly achieved the fuel efficiencies CAHSRA assumes for 2035.

We also pointed out that the current generation of new jet planes are at least 15% more fuel efficient than previous models and that at least one more generation of jet engines will come online before the HSR system is completed, resulting in additional fuel economy improvements in coming years.

Finally, we noted that airlines were beginning to test so-called Electric Green Taxiing Systems (EGTS) that would allow airplanes to shut down their jet engines while on the ground, reducing overall jet fuel consumption by at least 4%. In the time since we submitted our comments, these systems have begun to be implemented. One manufacturer, WheelTug, already has orders to put its EGTS on nearly 800 aircraft¹² and a number of manufacturers continue to develop and refine EGTS.¹³

¹¹ Parsons Brinkerhoff, *California High-Speed Rail Benefit-Cost Analysis (BCA)*, prepared for the California High-Speed Rail Authority, April 2012, p. 13.

¹² WheelTug, “WheelTug Order Book Now at 781 Aircraft,” press release, Jan 29, 2014, http://www.wheeltug.com/pr/pr_20140129.php.

¹³ T. F. Johnson, “Electric Green Taxiing System (EGTS) for Aircraft,” Institute of Electrical and Electronic Engineers (IEEE), March 5, 2014, <http://electricvehicle.ieee.org/2014/03/05/electric-green-taxiing-system-egts-for-aircraft/>.

Thus, despite the fact that CAHSRA has changed its future fuel efficiency values for aircraft, those values are simply incorrect on their face, causing CAHSRA's modeling to overstate the environmental benefits of HSR relative to air travel in future years. In addition, by overstating future aircraft fuel consumption, CAHSRA probably overstates the likely future costs of air travel relative to HSR, making HSR seem more cost-competitive than it will actually be and thereby overstating future HSR ridership and, therefore, HSR's air pollution and greenhouse gas reduction benefits.

CAHSRA Response B0027-6: Nonresponse to comment that airlines will protect their market share, thereby countering the asserted ridership growth and environmental benefits.

In our comments, we pointed out that CAHSRA, in its ridership and revenue forecasting, assumes that airlines will not take any steps (e.g., cutting fares, improving service, etc.) to protect their market share in the face of competition from HSR. CAHSRA responded, "There is no evidence that airlines will see a significant decline in the [sic] short-distance air travel demand with the introduction of HST because of persistent and growth [sic] travel demands in California and because there are enough long-distance service routes in which air transport is irreplaceable."

CAHSRA's response is fallacious and fails to respond to the substance of our points. As CASHRA notes, air travel demand will likely grow between now and the year when HSR becomes operational. But our point remains valid regardless of the amount of future growth in air travel demand. Whatever the level of air travel demand at the time HSR becomes operational, HSR will reduce air travel demand by diverting some would-be air travelers to HSR—indeed, proponents of HSR argue that reducing demand for air travel is one of the main purposes for building HSR in the first place.¹⁴ CAHSRA itself predicts that HSR will reduce demand for air travel: "Starting in 2030, the state [of California] will see a reduction of 93 to 171 flights daily."¹⁵ It is both nonsensical and self-contradictory for CAHSRA to claim that HSR will not reduce demand for air travel.

In our comments, we showed that U.S. law protects domestic airlines from competition by foreign carriers, while Europe's "open skies" air travel market is much more competitive, resulting in lower fares in Europe for routes of similar distance to California air travel routes. We noted that this indicates that California air carriers have room to cut fares if they have a competitive incentive—such as new competition from HSR.

Our key point was that in forecasting the competitiveness of HSR with air travel, CASHRA made the unsupportable assumption that airlines would not take steps to reduce the number of travelers who switch from air to HSR, such as cutting fares or increasing amenities, and that this caused CAHSRA to overestimate HSR ridership and therefore the

¹⁴ A Google search for the words "California high speed rail reduce airport congestion" (without quotation marks) produces links to numerous blogs and reports from various HSR proponents (including CAHSRA) that make this argument.

¹⁵ CAHSRA, "Good for the State, Good for the Environment," HSR Fact Sheet, October 2013, <http://www.hsr.ca.gov/docs/newsroom/fact%20sheets/Good%20for%20the%20State,%20Good%20for%20the%20Environment.pdf>.

environmental or transportation benefits of HSR. CAHSRA failed to respond to this concern in its response to comments on the DEIR/DEIS or to account for it in the FEIR/FEIS.

CAHSRA Response BO027-8: Response does not demonstrate that VERAs to mitigate the regional air quality of the ICS will be feasible or effective.

In response to our comment, CAHSRA states

“The construction emissions associated with the Initial Construction Segment are handled by AQ-MM#4 and will offset the criteria pollutants in the year that emissions occur. The mitigation measure AQ-MM#4: Offset Project Construction Emissions through an SJVAPCD VERA provides that the Authority and SJVAPCD will enter into a contractual agreement to mitigate by offsetting to net zero the project's actual emissions by providing funds for the district's Emission Reduction Incentive Program.”

The FEIR/FEIS assumes a VERA will be effective in mitigating 100% of this section's construction period emissions. It concludes, regarding construction-period impacts:

“NO_x emissions would exceed the mass emission SJVAPCD CEQA significance thresholds for most of the construction phase, while VOC, PM₁₀, and PM_{2.5} emissions would exceed the mass emission SJVAPCD CEQA significance thresholds for some of the construction phase. Therefore, the project may violate an air quality standard and/or contribute substantially to an existing or projected air quality violation for NO_x, VOC, PM₁₀, and PM_{2.5}, and, as such, has the potential to result in a significant impact under CEQA... These emissions would only last through the HST construction period and would be offset through the VERA program (AQ-MM#4)...”¹⁶

CASHRA has promised to enter into a Voluntary Emission Reduction Agreement (VERA) with the San Joaquin Valley Air Pollution Control District (SJVAPCD) but does not yet appear to have done so. CEQA requires that project proponents provide details on how they will mitigate significant environmental impacts of projects, rather than merely promise to do so at some future date. (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 727 [groundwater purchase agreement held inadequate as mitigation because no record evidence existed that replacement water was available]; *Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1116 [“no substantial evidence [in EIR] that the mitigation measures are feasible or effective in remedying the potentially significant problem of decline in water levels of neighboring wells”].)

EPA Region IX expressed a similar concern in its comments on the DEIR/DEIS: “The FEIS should include details on the Voluntary Emissions Reduction Agreement (VERA), including specific incentives and strategies for focusing emission reductions proximate to actual impact locations in order to focus mitigation measures on those communities most impacted.”¹⁷

¹⁶ FEIR/FEIS p. 3.3-91.

¹⁷ Enrique Manzanilla, EPA Region IX, comment letter to CAHSRA on the Supplemental DEIS for the Fresno to Bakersfield Section, October 19, 2012.

The FEIR/FEIS concludes that mitigation measures will ensure that HSR construction emissions are not significant. However, it is not possible to judge the validity of this claim without seeing the details of the promised VERA, including the likely cost of the promised mitigation measures and funding sources to ensure that the mitigations can actually be implemented. The FEIR/FEIS should not be adopted or certified until a VERA is implemented and its measures are demonstrated to reduce HSR construction emissions to the “net zero” level CAHSRA promises in the FEIR/FEIS.

Additional Issues

The 15% design plans are unclear on the amount of dirt required for construction of the Fresno to Bakersfield line and the Initial Construction Segment. CAHSRA should clarify the assumptions regarding the total volume of dirt required, total truck-miles of dirt hauling, and resulting air emissions that were used for the FEIR/FEIS, and whether these assumptions differ from CAHSRA’s current estimates of these factors in its actual construction plans.

Coccidioidal Meningitis in Kings County
A Public Health Perspective

Michael L Mac Lean, M.D., M.S.
Health Officer, Kings County, California
December 1, 2011

Kern Minority Contractors Association

1330 E. Truxtun Ave, Bakersfield Ca. 93305

Date: May 6, 2014

To: Chairman Dan Richard & Board Members

Cc: FRA

From: Marvin Dean, President

Re: **CHSRA Final EIR/EIS Fresno to Bakersfield Section** – Written Comment

Comment behalf of myself;

KMCA / SJVBCA / **Environmental Justice Residents & Business Owners** along project alignment effected by California High – Speed Rail Train Project
Fresno to Bakersfield Section.

We continue to support the project, but have serious concern more need to done that provide opportunity for San Joaquin Valley environmental justice smaller micro business, sub contractors & construction workers along route alignment.

Background

I have attend most of CHSRA meeting on central project past ten year raising concern regarding CHSRA federal funded project impacting central valley environmental justice community lack of opportunity or program to be included in the project construction. After coalition group file complaint; FRA requested CHSRA create small program 30% SB/DBE/DVBE goal which is great but we have long way to go. What in place now is not enough to remove barrier that prevents these environmental justice communities' residents to be included in this project?

Recommend & Request

1. Prime Contractor / SB Compliance change (See attach Sanford Group suggestion)
2. RFP –Environmental Justice Technical Assistance & Mentoring Pilot Program
3. Request to meet with CHSRA CEO review outline of our un solicited proposal

*San Joaquin Valley Construction Academy

Provide environmental justice resident & business technical assistance & mentoring



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Diversity Consultants

May 6, 2014

Chairman Richard and Board Members
California High- Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814

Reference: SBE/DBE LIAISON QUALIFICATION REQUIREMENTS

We are a supporter of the California High Speed Rail (CHSR) and a member of the US High Speed Rail Association and KERN Minority Contractors Association. Given the potential Environmental Impact / Socially Economic Impact; and more specifically the social economic impact on the diversity community; it is imperative that a strong SBE Program is implemented as a means to mitigate that potential impact. However, we are both concerned and confident that the California High Speed Rail's (CHSR) approach to the SBE Program will not result in the stated commitment to achieving a successful program.

The Office of Inspector General's (OIG) recently completed an April 2013 audit of the Department of Transportation's (DOT) Disadvantage Business Enterprise Program (DBE), which included all DOT departments: FTA, FAA, FHWA, FRA cited weaknesses in their operating administration.

Many of the same concerns and issues identified at the Federal levels were founded to exist at the state and local levels, as well; creating system wide concerns for the OIG.

Concerns, weaknesses and issues identified appeared to be focused around four major categories of weakness:

- 1) Contract Compliance Audits
- 2) Commercially Useful Functions (CUF) Reviews (On Site Audits)
- 3) In Adequate Staffing Support and Staff Training
- 4) Business Development Programs to facilitate success in the marketplace

The OIG's 2013 Audit verified that these issues exist across the country at both the state and local levels of the program, and create the risk of having a severely negative impact on the DBE Program

Due to these recent concerns raised by the Office of Inspector General, it is imperative that on a project of this magnitude that the CHSR SBE program/plan not be compromised. Reducing the SBE Program/Plan administration workload requirements for the CHSR Authority (recipient agency) and Project Construction Managers will strongly increase the opportunity for the success of the SBE Program. A successful SBE

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Program will insure that the SBE Program will not be subjected to the elevated and often time's destructive scrutiny associated with very high profile and controversial projects of this type. This potential scrutiny and attacks could severely impact the program's ability to mitigate and respond to any socially economic impact issues identified by the Environmental / Socially Economic Impact Study.

Today's political environment, requires that the design and construction industry contractors must respond to the ever-increasing complexities of complying with diversity participation goals, and insuring that they are executing and managing their SBE Plan.

Clearly, the Offices of Inspector General is sending a strong message: **non-compliance will not be tolerated and will be investigated and prosecuted to the fullest extent of the law.**

OUR RECOMMENDATION

We believe the CHSRA's commitment to the SBE Program can increase their ability to achieve a successful SBE Program by executing the following recommendations.

The SBE Program Liaison position should be an Independent Consultant and not an employee of the Project Construction Managers or project delivery teams. The SBE Program Liaison position should be structured within the team organization to provide direct communications with the Team Project Director position.

The success of the program is directly impacted by the ability of the SBE Program Liaison to respond quickly to SBE Program issues and concerns regarding compliance monitoring issues. **This requires the ability to provide un-filtered information to the CHSR Authority and receive un-filtered information from the primary decision makers of the team.**

Each team SBE Program Liaison should also be required to report directly to the Program Construction Manager (PCM) and a contact person with the CHSR Authority. This approach is consistent with standard industry practices requiring Project Managers responsible for critical elements of the project to report directly to the Program Construction Manager, i.e. Design Project Manager, Construction Project Manager, Chief Estimator, etc.

Elevate SBE Program / SBE Liaison Requirements

The success of the SBE Program is one of several conditions to be met to consider the project a success and should be elevated to a similar level of importance as other requirements of the project, i.e. Company



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Experience, Project History, Individual Team Members Experience, Meeting the Project Budget, Meeting the Project Schedule, etc. To achieve that effort the SBE Liaison requirements must also be elevated and specific requirements for the individual / individuals performing that task and their ability to demonstrate that they possess the required experience and industry knowledge is imperative.

The Request for Qualifications (RFQ) and/or Request for Proposal (RFP) is the first opportunity for the respondent to fully understand CHSR'S commitment and requirements for their SBE Program. We are suggesting that the following language or similar language if not presently included in the RFQ/RFP should be added:

Each Construction Manager at Risk (CMAR) and/or Design/Build Team, and/or Public Private Partnership (PPP) team; depending on the project delivery system chosen, should be required to include a SBE Liaison as a member of their team. The SBE Liaison should be able to show demonstrated experience working on similar projects as a SBE advocate with technical experience sufficient to assist with meeting participation goals at all levels of the project, to include design, construction, business, and concession opportunities. The SBE Liaison's experience should include a minimum of ten (10) years of demonstrated experience and knowledge working in the design and construction industry. A strong understanding and working knowledge of the application, interpretation, and implementation of the requirements of the 49 CFR Parts 26 should be a non-negotiable requirement.

In addition to their technical qualifications the SBE Liaison should provide a minimum of three project examples similar in size and type to the proposed project to include not less than three transportation project that required compliance with SBE participation goals.

The following information should be provided on the projects identified:

- Project Name
- Project Location
- Owner's representative for the project
- Project DBE/SBE participation goal verses actual participation attained
- If the DBE/SBE goal was not obtained explain the lessons learned and recommend preventative measures to be implemented to avoid similar results on the proposed project.

A SBE Plan outline should be submitted inclusive of the following elements with detailed deliverables submitted when requested.



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- 1) A comprehensive outreach program consisting of several initiative and strategies to increase the awareness of DBE/SBEs to opportunities on the project.
- 2) A contractor support services program designed to assist the DBE/SBE contractors with locating and identifying support services to assist with their ability to be competitive on project opportunity responses as well as may be required to complete project contracts when acquired.
- 3) A program for locating and identifying qualified and interested DBE/SBE contractors ready to respond to contract opportunities.
- 4) A comprehensive program Compliance Monitoring and Reporting system with standardized operating procedures, responsibilities, forms and reports. The system should track commitments/awards, payments and disputes with the DBE/SBE, ethnicity, gender, geographical locations, work category, and participation levels of all prime, 1st Tier, and 2nd Tier contracts.

Submittals that do not respond to these requirements should be considered to be non-responsive and will not be considered for contract award.

Best Regards,

Adriane Sanford
Adriane Sanford

Best Regards,

Reuben Brown
Reuben Brown

May 5, 2014

California High Speed Rail Authority Board

Attn: Chairman Dan Richard

770 L Street, Suite 800

Sacramento, California 95814

Re: Comments Final EIR

In this submission letter I address mostly NEW information added to the FEIR/EIS. I will also address the California High Speed Rail Authority's response to my written and oral submissions to the record and rebut some of the information.

1. The EIR states that localized impacts on sensitive receptors within 1,000 feet of the guideway/alignment construction would not be significant under NEPA and the impact would be less than significant under CEQA because the cancer risk from emissions would be less than 10 in a million and the non-cancer hazard index would be less than one. Health risk assessments of construction emissions for sensitive receptors near station construction sites, concrete batch plant operations, and HMF/maintenance of way facility (MOWF) construction sites also found the cancer risk to be less than 10 in a million and the non-cancer hazard index to be less than one. Therefore, localized impacts to sensitive receptors from construction of these facilities would not be significant under NEPA and the impact would be less than significant under CEQA. Air quality construction impacts associated with the HST project would be above the SJVAPCD's significance thresholds for regional criteria pollutants and together with other past, present, and foreseeable future projects would be cumulatively considerable before mitigation; however, with implementation of the mitigation measures identified in Section 3.3.9, the project's emissions would be net zero with offsets. Therefore, consistent with the SJVAPCD's Guidance for cumulative impacts analysis, the HST alternatives' contribution to cumulative construction air quality impacts after mitigation would not be significant under NEPA and would not be cumulatively considerable under CEQA. Project operations for all HST alternatives would result in a net benefit.

REBUTTAL : According to the EIR/EIS, there is a 5 year period when Annual Construction phase Emissions exceed conformity applicability thresholds (tons/year).

In the highest producing year (estimated in the EIR/EIS to be 2015) Annual NOx levels increase 6079.9% over acceptable thresholds. VOC levels increase 266.9% over thresholds.

In real life, there is a problem with the notion that elevated levels can be identically mitigated pound for pound, by paying monies to programs that will offset these exponentially high emissions in some other location within the SJVAPCD. The air district is very large. Even though, the "intent" may be to offset

these emissions in close proximity to where they are being produced, this is not always possible. The reality is that these emissions cannot be mitigated to a less than significant degree ON-SITE. Given the number and proximity of population groups this is unacceptable.

When reviewing the alignments proposed through Bakersfield, there is an approximate 12 mile section that will be elevated. Concrete pillar/structure supports will be spaced 60-120 feet apart. In order to create the up to 720 concrete supports, concrete batch plants, chemicals and dust will be in very close proximity to schools, churches and a very large hospital. The site specific adverse impacts will remain even with programs funded under a VERA.

It is way too premature to be able to state that project operations would result in a net benefit. This relies on the assumption that monies will be found to actually fund the rest of the construction, as well as run a functioning electrified high speed train with high ridership. We have no money allotted to build it.

I list specifically what the EIR/EIS states in relation to some air pollution impacts:

AQ #1: Construction of the HST alternatives would exceed the CEQA emissions thresholds for VOCs, NOx, PM10, and PM2.5. Therefore, it could potentially cause violations of NO2, O3, PM10, and PM2.5 air quality standards or contribute substantially to NO2 O3, PM10, and PM2.5 existing or projected air quality violations.

AQ #2: Construction of the HST alternatives would exceed the CEQA emissions thresholds for VOC, NOx, PM10, and PM2.5. Therefore it would conflict with the 1-hour Ozone Attainment Plan, the 8-hour Ozone Attainment Plan, and the PM10 and PM2.5 Attainment Plans.

AQ #3: Material hauling outside the SJVAB would exceed CEQA emission thresholds for NOx in the BAAQMD, Mojave Desert AQMD, Eastern Kern County APCD, and the South Coast AQMD, and would exceed the VOC threshold in South Coast AQMD for certain hauling scenarios. Therefore, it could potentially cause violations of NO2, and O3 air quality standards or contribute substantially to NO2 and O3 existing or projected air quality violations in those air district (mm2 and mm5AQ-MM#5: Purchase Offsets for Emissions Associated with Hauling Ballast Material in Certain Air Districts(i.e., Mojave Desert AQMD, BAAQMD, and the South Coast AQMD).

AQ # 8: Construction of the alignment may expose sensitive receptors to temporary substantial pollutant concentrations from concrete batch plants.

AQ #16: Operation of the HST station, HMF/MOWF may cause the total PM10 and PM2.5 ambient concentrations to exceed CAAQS due to the existing exceedances in the area.

PUBLIC COMMENT SECTION:

During the comment periods for the draft environmental documents, there were 1,472 comment submittals on the Fresno to Bakersfield Section Draft EIR/EIS, and 783 comment submittals on the Revised Draft EIR/Supplemental Draft EIS. The comments covered a wide range of issues and represented viewpoints from government agencies, organizations, business groups, businesses, residents, and property owners. Of the 2,255 submittals, 124 generally supported the project and 630 were generally opposed. The other submissions did not specifically state a preference for or against the project. Most comments came from individuals in the general public, living, working, or having property interests in the project study area. It should be noted that there were five times as many people who opposed the project than supported it.

1.MY COMMENT REGARDING USING OUTDATED POPULATION DATA-REQUESTING HSRA TO RE-DETERMINE MORE CURRENT NUMBERS USING 2010 Census instead of outdated 2000 Census)

YOUR RESPONSE: The Federal Railroad Administration and Department of Transportation issued a notice of intent to prepare an environmental impact statement for the California High Speed Train Project for the Fresno to Bakersfield Section on October 1, 2009. This date established the reference year of the affected environment. At that time, the 2010 Census data had not been published and therefore, the 2000 Census data were used for the socioeconomics analysis, in addition to more recent data from the American Community Survey, the California Department of Finance, the California Employment Development Division, the California State Board of Equalization, as well as local data sources. The methodologies used to identify and analyze affected populations, as well as all data sources used, are detailed in Appendix A of the Community Impact Assessment Technical Report (Authority and FRA 2012h).

MY REBUTTAL:

While you may have used other more recent data from survey as well as from local and other governmental agencies in OTHER parts of your socioeconomic analyses---this was not the case when developing the numbers to show the numbers of people who live within .5 miles from the proposed alignments. (See chart attached). The populations you used came ONLY from the 2000 CENSUS, which is currently 14 years old. You agree in your responses to me that there "are" 81,699 people in Kern County within .5 miles of the alignments. HOWEVER, you neglect to state that there are likely far more people living within .5 miles of the alignments NOW. Bakersfield has grown in population significantly in 14 years. Using the 2000 Census to report this very important statistical information is misleading. Using the 2000 Census numbers give an inaccurate report of the numbers in ALL counties within The Fresno-Bakersfield HSR section. It was very reasonable to ask for revised numbers based on the 2010 Census which is easily attainable.

Therefore, it is reasonable to say that moderate to severe Impacts to our community for noise, vibration, air pollution ARE elevated far beyond what these figures represented. Some of the included charts only identify sensitive receivers who are severely impacted by noise. This gives the false impression that the large numbers of moderate impacts are insignificant. Moderate impacts of noise can

be health and lifestyle altering. Moderate noise impacts can affect sensitive receivers up to .5 mile from the alignments. . It is important to point out that this also means that more people are potentially at risk for exposure to Valley Fever Spores during both construction and operation of the HST.

2. ADVERSE AIR IMPACTS

MY COMMENT: The adverse impacts to our air quality during the Construction phase are unacceptable. It will take decades of having a fully built operational electrified HSR system with maximum projected ridership to even come close to making up for the damaging effects produced during the Construction Phase through the Valley. And again, there is cause for concern that it may never fully be funded or built. We have one of the worst problems with air pollution in the country, yet the HSRA is willing to risk our health by planning an alignment that may not be completed, yet will still expose us to contaminants

RESPONSE : Regarding air quality, construction of the HST alternatives has the potential to cause temporary and significant localized air quality impacts, including the exceedance of applicable de minimis thresholds for specific criteria pollutants. Operation of the HST alternatives would provide a net regional air quality benefit. Operation of the HST alternatives would generally reduce regional criteria and greenhouse gas pollutants from a reduction in regional vehicle miles traveled (VMT), and would have a beneficial impact under NEPA and a less-than significant impact under CEQA on air quality. Impacts on air quality are discussed in Section 3.3.6.3. The train itself will be electrically powered and will therefore not emit pollutants.

REBUTTAL:

The EIR/EIS once again is banking on their ability to produce an operational HST project which currently does not have the funding to complete. Additionally, there is a real possibility that the project could be ended or significantly altered. IF not completed, and/or the ridership numbers do not hold true, these projected net benefits will not exist. The EIR/EIS has failed to note that electricity will not necessarily be produced by “clean energy” methods. Fossil fuels will likely be burned to create that electricity.

3. VISUAL EFFECTS AND PRIVACY

MY COMMENT: There is little mention of any concern for the visual blight that miles of elevated viaduct will bring, nor the right to privacy that will be violated, as train passengers are able to view into private backyards well over a 1500 feet from the proposed alignments. The EIR does not detail how it will truly compensate/mitigate for the relocation of community assets. Simply writing a check for “damages or adverse impacts” is not sufficient mitigation. This is a quality of life issue.

RESPONSE: The visual effects of elevated viaducts are analyzed and discussed numerous times throughout the Revised DEIR/Supplemental DEIS for all situations where adverse impacts could be anticipated (see Section 3.16.5.3). For high-sensitivity viewer groups who could be affected by elevated viaducts, key analytical viewpoints were selected and visual simulations presented. For example Key Viewpoints (KVPs) 14, 15, 16, 17, 19, 25, 26, 27, and 29 depict and analyze the potential impacts of elevated viaducts on different sensitive viewer groups in the city of Bakersfield. Numerous instances of significant impacts due to the introduction of these viaducts may be found throughout Section 3.16.5, Environmental Consequences, of Section 3.16, Aesthetics and Visual Resources.

There are potential visual impacts within up to ½ mile of the alignments, but such impacts are not necessarily the case. In most instances, particularly in dense urban settings, the majority of locations within that distance of the alignments will have their potential views of the alignments blocked by intervening development or tree canopies.

Regarding the concern for privacy, although it is true that the elevated segments of the HST alignments will pass nearby residences at some locations, the trains will generally be traveling at over 200 miles per hour when they do so. At those speeds, the visual exposure to any given residence would not last longer than a split second, so visual invasion of privacy was not considered a likely impact.

REBUTTAL: Apparently your consultants are not familiar with the location of the elevated alignments through Bakersfield. The majority of locations within ½ mile distance of the alignments will not have their potential views blocked by intervening tree canopies. These viaducts will be up to 80' tall. It would take decades to plant trees that would reach heights to eliminate the view of the viaducts, let alone the train and electrical apparatus above it.

The HST will not be traveling at 220 mph at all times when it passes and/or stops in Bakersfield. Passengers will have more than a "split second" to view outside their windows as they pass through neighborhoods.

4. REGARDING LOSS OF PROPERTY TAXES—KERN LOSING MOST OF ALL COUNTIES

MY COMMENT: With regard to effects on property taxes due to removal of homes/other structures in 4 Central Valley counties, the biggest effect is in Kern County. The total of all 4 counties is 2.3 million dollars in lost property tax revenue, with Kern seeing a decrease in \$1.4 million (over 3X more than Fresno's \$450,000).

YOUR RESPONSE: The HST operation-related property tax revenue effects mentioned in the comment are accurate. The analysis in Volume Section 3.12 Impact SO#12 and Section 5.4.4.2 of the Community Impact Assessment Technical Report (Authority and FRA 2012h) examines the reduction in property tax revenues that would result from acquisition of land for project construction. The economic impact to Kern County from the reduction in property tax revenues was found to be less than significant because

the reduced income would be small relative to the total net income of the county. The reduced income would not be perceptible to community residents; no mitigation is required.

REBUTTAL : I strongly disagree with this conclusion. A decrease in \$1.4 million to any logical thinking person IS significant. In a county that has a disproportionate number of residents falling within low socio-economic groups, these funds will be sorely missed. No compensation for this impact is illogical and unfair.

5. ADDRESSING SPEED OF HST AS IT COMES THROUGH URBAN AREA

COMMENT: Speeds through towns and urban areas were thought to have been decreased to a speed of 125MPH.

YOUR RESPONSE: The HST was never planned to operate at 125 miles per hour (mph) on a sustained basis. Proposition 1A states that the HST shall consist of "Electric trains that are capable of sustained maximum revenue operating speeds of no less than 200 miles per hour" (California Streets and Highways Code, Division 3, Chapter 20, Section 2704.09[a]). As stated in Section 2.3 of Chapter 2, Alternatives, the Fresno to Bakersfield Section design criteria dictate 220-mph designs throughout. This speed is required to meet the legislated mandate of a travel time between San Francisco and Los Angeles of 2 hours and 40 minutes.

REBUTTAL COMMENT: Bakersfield is proposed to have approximately 12 miles of elevated viaduct throughout its city core. Safety issues arise with extremely high speeds through urban areas (Europe/Asia..) Speeds of 220mph are therefore not advised. Even if such a speed was kept through this area, it would only be for a non-stop train. Trains that stop at Bakersfield would not be able to attain speeds of 220 mph through the majority of the elevated areas of the route. Therefore your argument is not valid. As noted in previous entry people's privacy will be violated who lie beneath and to the sides of the elevated train for long distances from ROW as the HST travels through neighborhoods.

ADDITIONAL COMMENTS I'D LIKE TO HIGHLIGHT THAT HAVE BEEN ADDED TO THE FINAL EIR/EIS . THESE FACTS ARE IMPORTANT FOR THE BOARD TO CONSIDER. THEY HAVE ONLY BEEN AVAILABLE FOR THE PUBLIC TO REVIEW SINCE APRIL 17, 2014

1.IMPACT TO PEOPLE/CHILDREN

While the higher population of children within the study area cited for Kern County is correct, the impacts are not disproportionate. As shown in Appendix C of Section 3.12 of the EIR/EIS, within the 0.5 mile area of the HST alternatives, 81,699 people reside in Kern County, of which 31.9% (or 26,062) are under 18. This is compared with the 18,610 people in Fresno County, of which 32.1% (or 5,972) are under 18. Greater numbers of displacements are expected in Kern County than other counties in the study area for the Fresno to Bakersfield section of the HST because it contains the City of Bakersfield, which is the largest and most urbanized city and because a station will be built and operated there

2.NOISE

All HST alternatives would have similar potential cumulative impacts on noise and vibration. The cumulative noise and vibration impacts of the HST alternatives and other past, present, and reasonably foreseeable projects during construction would be significant under NEPA and would be cumulatively considerable under CEQA. Operations-related impacts of the HST alternatives would have a substantial intensity because of the large number of sensitive receivers along these corridors.

PROJECT IMPACTS NOTED: NOISE AND VIBRATION (N&V)

N&V #3: Moderate and severe noise impacts from project operation to sensitive receptors.

N&V-MM #3: Implement Proposed California High-Speed Train Project Noise Mitigation Guidelines

N&V- MM #4: Vehicle noise specification.

N&V-MM #5: Special trackwork at crossovers and turnouts.

N&V-MM #6: Additional noise analysis following final design.

N&V-MM #5: Special trackwork at crossovers and turnouts.

N&V-MM #6: Additional noise analysis following final design.

RESULT: Level of significance after mitigation: Significant in some locations; less than significant where fully mitigated

N&V #5: Impacts from project vibration.

N&V-MM #8: Implement Proposed California High-Speed Train Project Noise and Vibration Mitigation Guidelines.

RESULT: Level of significance after mitigation: Potentially significant

3.TAXES

Project construction spending for all alternatives would result in beneficial gains in sales tax revenues and employment in the region. These short-term economic benefits to the region would be of moderate intensity under NEPA. Construction activities that could affect sales prices of nearby properties and result in lower property tax revenues would have an effect of moderate intensity under NEPA. The current context of the region is one of challenging county and city budget deficits and high

unemployment. Given this moderate intensity and context, the overall beneficial effect would be significant for the duration of construction.

4. COMMUNITY INTEGRITY/QUALITY OF LIFE

The impacts of noise, dust, visual changes, and changes in traffic patterns would not affect overall community integrity but would affect quality of life in the communities surrounding project construction zones. All of the alternatives would result in effects of moderate intensity on community interactions during construction. The context of these communities varies from urban settings, where construction can be a common occurrence, to rural settings, where such a construction project would be in stark contrast to existing conditions. Given this moderate intensity and context, the overall impact would be significant under NEPA for the duration of construction. Adverse effects of project operation include the potential to divide adjacent communities by physically removing homes, businesses, and community facilities and placing a new linear project through the community outside of and away from the existing railroad right-of-way.

The intensity of this effect would be substantial for several small, unincorporated communities along the alternative alignments (e.g., Ponderosa Road east of Hanford, Newark Avenue northeast of Corcoran, 5th Avenue and Waukena Avenue east of Corcoran, and Crome between Shafter and Bakersfield), as well as in the affected neighborhoods of Bakersfield, where right-of-way acquisition would divide communities and disrupt community facilities, such as the Mercado Latino Tianguis, Bakersfield High School, a Mercy Hospital medical complex building, and several religious facilities. The impact to these communities would be significant under NEPA and CEQA.

The regional context is one where established neighborhoods in urban and rural communities would be disrupted and displaced commercial and agricultural businesses have great importance to the local economies. Given this substantial intensity and context, the overall impacts would be significant under NEPA. Given the regional context of challenging county and city budget deficits, high unemployment, and the importance of the agricultural industry to the regional economy, the impacts would be significant under NEPA.

5. PROJECT IMPACTS (LOW INCOME AND MINORITY GROUPS)

Project impacts occurring disproportionately on minority and low-income populations would be concentrated in urban areas including Fresno, Corcoran, Wasco, Shafter, and Bakersfield, as well as in rural areas such as Newark Avenue, 5th Avenue and Waukena Avenue in Corcoran, and Crome. These impacts would include an increase in both ambient noise levels and vibratory impacts above standards; disruption of communities and the displacement of community facilities, changes or loss of park resources, decreases in visual quality, and cumulative impacts for noise and vibration, aesthetics and visual resources, and communities.

6. VISUAL IMPACTS:

The cumulative visual effect of HST construction activities in combination with other past, present, and reasonably foreseeable future projects would be significant under NEPA and cumulatively considerable under CEQA in areas where multiple construction activities are located in close proximity. The HST alternatives would contribute to such impacts through introducing prominent visual features, such as at-grade or elevated structures, contact power systems, sound walls, associated road overcrossing structures, and other features that could cause a decline in visual quality. Therefore, the HST alternatives' contribution to cumulative impacts would be significant under NEPA and would be cumulatively considerable under CEQA.

7. S.10 Areas of Controversy

Based on the scoping meetings and public outreach efforts throughout the environmental review process, the EIR/EIS states that the following are known areas of controversy:

- Selection of the preferred HST alternative.
- Impacts on special-status plants and wildlife and wildlife habitat preserves.
- Impacts on corridor communities (including noise, visual quality impacts, loss of community character and cohesion, impacts to low-income and minority populations, and right-of-way acquisition).
- Impacts on farmlands (including severance of farmlands, loss of productive farmland, and loss of agricultural enterprises)
- Trade-offs between corridor communities and agricultural lands.

Many of these areas of controversy remain because they have never been adequately addressed. The CAHSRA continues to state that communities were actively involved in the process, when in reality, valuable information about impacts were not openly shared. Communities were not able to be fully engaged in choosing the least environmentally impacted route for the California High Speed Rail Project once significant adverse impacts were revealed.

That said, this EIR/EIS should not be certified at this time. Further study into impacts, alignments and appropriate mitigations must be done prior to breaking ground on any segment of this project.

Thank you for allowing me to submit my comments prior to the board meeting to consider this EIR/EIS certification.

Carol Bender R.N., P.H.N.

Carol Bender R.N., P.H.N.



May 5, 2014

California High Speed Rail Authority Board

Attn: Chairman Dan Richard

770 L Street, Suite 800

Sacramento, California 95814

Re: Comments Final EIR/EIS Comments on Valley Fever Impacts

On May 6, 2014, the HSRA Board will meet to discuss the certification of the Fresno-Bakersfield Final EIR. In particular I refer to:

1. Resolution #HSR 14-09 which certifies the completeness and adequacy of the Fresno to Bakersfield section Project EIR/EIS for compliance with CEQA, and 2. Resolution #HSR 14-10 which approves the Preferred Alternative from Fresno HST station to 7th Standard Road in Kern Co.

Resolution #HSR 14-10 states that significant environmental effects that are found to be unavoidable but are acceptable due to the overriding considerations and benefits expected to result from implementing the Preferred Alternative to 7th standard Road, as well as the Preferred Alternative as part of the Statewide HST plan.

The first step at the approval stage is for the Board to certify, if it so chooses, that the Final EIR/EIS is adequate as an informational document for the Board about environmental consequences of the project.

Staff's recommendation to approve the portion of the Fresno to Bakersfield Section (Preferred Alternative) only to 7th Standard Road is made in recognition that the Authority, as of now, has not secured funding to build into Bakersfield. Secured funding is sufficient to construct at least to 7th Standard Road, so only approval to that location is being requested. The EIR/EIS contains analysis all the way to the proposed downtown Bakersfield station, which (if the Board certifies it) facilitates approval for facilities south of 7th Standard Road **when warranted**. The definition or explanation of "when warranted" is notably omitted.

I speak in this submission not only to the inadequacy of this complete EIR/EIS. I specifically would like to address inadequacies in that portion of the EIR/EIS from 7th Standard Rd to the proposed Bakersfield station, that is analyzed within it. It is the impression of this commenter that if this EIR/EIS is certified, Bakersfield will be accepting all studies, impacts and mitigations as accurate and complete. If that is true, then it would be a gross mistake to certify it. The reality is that all the alignments proposed from 7th Standard Rd. to downtown Bakersfield (including all 3 station sites) are opposed by the local

government and its citizens due to the significant number of adverse environmental impacts not previously known prior to the EIR process. There is no assurance (CLEARLY IN WRITING) that alternative alignments that bypass Bakersfield and station sites outside of the downtown area will be studied and carefully considered. Without such a contractual agreement , or definitive acknowledgment that a revision of that portion of the current EIR/EIS will definitely occur, it would not be in the best interest of Kern County to accept the current EIR/EIS in its entirety. The City of Bakersfield, County of Kern and KCOG have been trying to negotiate a study of an alternative bypass alignment for nearly 3 years, but have been refused. The City of Bakersfield has not accepted a grant to update its general plan to reflect a downtown station.

That said, I would like to address specific issues that necessitate a recirculation of this EIR/EIS or specific portions within it. In a separate comment letter I will address responses made to my written and verbal comments during the public comment period and post-comment period.

Under CEQA, a recirculation of the Draft EIR is required only when significant new information is added to an EIR after public review, but before certification (CEQA Guidelines, §15088.5). New information added to an EIR is not 'significant' unless 'the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement (Guidelines, § 15088.5(a)). Other than in the Letter/Response to Comments chapters in the FEIR--- neither the text of the DEIR or FEIR address the impact of the high speed rail project and its propensity to increase the risk of the spread of coccidioidmycosis (Valley Fever) spores both during construction and upon operation of a high speed train. After examining the reports , it appears that the Valley Fever issue is brought up by a number of people submitting comments , both written and verbal--however these inquiries are simply given this response: GENERAL RESPONSE : Refer to Standard Response FB-Response-AQ-01. This states:

"Although Valley Fever fungi are commonly found in the soil in the Central Valley and can be stirred into the air by anything that disrupts the soil, the potential for the operational HST to generate dust through induced air flow is low. Therefore, the impacts from Valley Fever during operations will be less than significant. In addition, the dust minimization measures listed in Section 3.3.8 of the Revised DEIR/Supplemental DEIS would further reduce fugitive dust emissions to a less-than-significant impact. Valley Fever spores would be released when the soil is disturbed; however, due to the minimization measures, fugitive dust disturbance during construction will be minimal. Therefore, impacts from Valley Fever spores will be less than significant."

Last week, I had the opportunity to have a lengthy conversation with Ms. Stephanie Perez at the FRA regarding my concerns about the damaging effects the Fresno- Bakersfield project will have on the Central Valley environment with regard to air quality and a variety of other issues. I had previously sent the FRA a letter in February after which I was invited to speak with Ms. Perez. That letter Ms. Perez

assured me with be placed In the post-comment period section of the EIS. During our conversation, I mentioned that I could not find any discussion regarding the study or implementation of mitigations to limit the spread of coccidioidomycosis (Valley Fever) spores during the construction and operation of this high speed train section.

As a health care professional and public health nurse I felt compelled to not only submit comments, but to spend the very limited few days the public had to review the FEIR before its certification researching this completely inaccurate conclusion . The FEIR cites no evidence for the claims that the standard SJVAPDC dust emission mitigations/MOU will reduce the spread of valley fever spores that are disturbed during the construction process or in the eventual operation of a high speed train. The conclusion that “minimization measures “ WILL reduce the impacts to “less than significant” is not true and it is not backed by any scientific evidence. I believe that any epidemiologist or researcher involved in the study of Valley Fever would refute that claim.

I took the opportunity of reviewing professional literature, internet materials, and case studies. I looked into ongoing research, most of it centered in California and Arizona where Valley Fever rates are the highest in the nation. I shared as much of this as possible with my community and those actively involved in this FEIR public review process –people that had far more support and resources than one public health nurse working from her home computer. I don’t have the resources to print all of the research articles out to submit to you. I did my best to list internet links so that each can be easily accessed and read in their entirety. I believe that many others are also researching and submitting studies and articles to both the CAHSRA and the FRA. We have all followed the process, submitted our questions, waited patiently for the FEIR/EIS to answer our concerns and comments, having been assured that the Valley Fever issue would be addressed specifically.

Once again we were misled. This information was not addressed . Having done a survey of the literature and research on the spread of Valley Fever spores , it is noted that there is definite concern regarding transmission during the HST operational phase, even when dust control measures are used during the construction phase. I will include a written comment by microbiologist Dr. Anje Lauer, PHd who is actively doing research on Valley Fever at California State University Bakersfield to support this. She has given permission for me to submit it to you. It is attached to this letter.

According to Dr. Lauer, standard dust control measures would not necessarily be effective for control of valley fever spores. In fact, in some instances, particularly in yet undiscovered hot spot locations, watering can worsen the spread. Watering will enhance the growth of spores. Additionally, disturbing soils and then leaving them free of water and bare of vegetation can increase the spread of spores AFTER construction is finished.

For the HSRA and FRA to boldly conclude that impacts from Valley Fever spores will be less than significant goes against the views of medical and research science. In reality, experts will tell you that given the length of the alignment from Fresno-Bakersfield, there WILL be construction areas where Valley Fever spores are disturbed. The problem is that there is no real way to predict just where these areas/spots will be. If all disturbed soils are heavily watered to limit dust control, those areas that have active spores will divide and multiply. Once a section is completed and the watering stops, this exposure area will likely be susceptible to spore spread in the next dry season, carried by winds.

Two years ago, the San Joaquin Valley Air Pollution Control District (SJVAPCD) held a study session/slide show presentation to facilitate discussion about Valley Fever issues/options ---educating themselves about Valley Fever and addressing Valley Fever mitigations issues. This study had likely been done in response to the bad press and lawsuits that occurred when it was publicized that Valley prisoners were being exposed and were developing Valley Fever. The State began to develop a plan to transfer patients (particularly blacks and other ethnic groups that were more susceptible) from Valley prisons. After looking at this slideshow and accompanying literature, it appears that even the SJVAPCD doesn't know a lot about how to truly mitigate Valley Fever.

SeeSlideshow

http://www.valleyair.org/board_meetings/gb/agenda_minutes/agenda/2012/may/studysession/item9-districtoptionsforvalleyfever5-1-12.pdf

Additionally a memo was released after the study session:

http://www.valleyair.org/Board_meetings/GB/agenda_minutes/Agenda/2012/May/StudySession/FinalItem9-BAM_ValleyFever_May_2_2012.pdf

The May 2, 2012 memo was sent by Dr. David Lighthall Ph.D., the SJVAPCD's Health Science Advisor and Seyed Sadredin, Executive Director/APCO. The memo states that "drying of the soil results in cocci being set adrift, attached to soil particles that grow smaller as they are successively blown short distances on the surface. The spores are 1.5 to 4.5 μm wide and 5 to 30 μm long. Over the course of a dry season, these particles are ground into smaller particles as they are incrementally pushed along the surface. Once the cocci-containing particles are small enough, they can become airborne in 10 to 20 micron-sized particles at wind speeds ranging from 13 to 22 mph. Broadly speaking, studies that have correlated weather patterns with outbreaks of the disease in the Valley indicate that heavy rainfall periods followed by very dry conditions create the optimum conditions for elevated incidence of the disease." This supports what Dr. Lauer commented on (mentioned previous above)...that the real worry may be that once the soil stops being watered (project completed)....the now-dry soils will have even larger numbers of spores now susceptible to airborne spread---thus increased risk for exposure.

Also in the May 2, 2012 memo, Dr. Bruce Leistikow, a lead epidemiologist with the California

Correctional Health Care Services stated that "the extremely high Valley prison infection rates and the lawsuits filed by inmates of Valley state and federal prisons are making it increasingly unlikely that new correctional facilities will be sited in the region." Following that logic----I ask , why are we building a high speed rail project in this area, when there are other alternatives? What are the future health consequences, health costs, liabilities , and future litigation costs?

He further states, "Eighty percent of the cases in California were found in Fresno, Kern, Kings, San Joaquin, San Luis Obispo, and Tulare Counties. Valley Fever continues to exact a very large price in lives lost, permanent disabilities, and disruption of economic activity for the San Joaquin Valley"

At a Citizens Advisory Committee(CAC) meeting May 7, 2012,

(http://www.valleyair.org/board_meetings/gb/agenda_minutes/agenda/2013/may/items/05.pdf)

David Lighthall Ph.D., the District's Health Science Advisor, provided CAC with a presentation regarding Valley Fever. He stated that "Valley Fever is caused by an airborne fungus that grows in soils, often on open unirrigated land, and its spores may be entrained in windblown particulate matter. Because the fungus occurs naturally on open land and is spread by winds, it would be extremely difficult to control sources or the spread of the spores. One hope for ultimately addressing Valley Fever could be the Valley Fever Vaccine Project, which was launched with grant funding from the California Healthcare Foundation, the State of California, and several other private and public sources."

When searching the SJVAPCD website for valley fever entries, there were very few. However, I was interested to find a recent newspaper article reporting about how much worse the air quality currently is due to the drought----and that a cardiologist was instructing his patient to stay indoors for 2 months to avoid the adverse impacts.

Link here: http://www.valleyair.org/recent_news/news_clippings/2014/inthenews_01-27-14.pdf This article raises some interesting questions: Will certain population groups be instructed to live mostly indoors for the 5 years planned to construct this HSR section? Will all ethnic prisoners be transported out of the Valley for 5+ years? How long after the project is complete will it take to be safe from the spores that were dislodged during construction? Once the watering of the disturbed soil is stopped, the spores will be susceptible to spread as winds disperse dust particles.

Valley Fever skin tests (called coccidioidin or spherulin) will indicate prior exposure to the fungus, but, because reactivity is lifelong, skin tests are not particularly helpful in diagnosing a current infection. Commonly, a routine chest x-ray will detect Valley Fever cavities in a person with no symptoms and who may be unaware of ever having had Valley Fever.

It should be noted that the skin test is currently not available—however it is expected to be available by the end of 2014. This test could be helpful in detecting previous exposures in workers prior to working in areas endemic for coccidioidomycosis. Additionally, it could detect whether or not they were exposed during the course of the project (if obvious symptomology was not present).

In September 2013, public outcry about potential exposure to dust and Valley Fever spores from construction and operation of the Hydrogen Energy California project (HECA) generated a proposal for specific mitigations to prevent Valley Fever exposures. It was submitted by the Sierra Club. The study is important and can be reviewed at this link: http://docketpublic.energy.ca.gov/PublicDocuments/08-AFC08A/TN200476_20130913T162653_Sierra_Club's_Comments_on_the_Preliminary_Staff_Assessment_Part.pdf

In Appendix 3.3-A, The FEIR discusses the Potential Impact from Induced Winds.

The study states that wind generated by a High Speed Train (HST) would be considered to be the daily average peak gust. Two studies/sources were cited:

1.Assessment of Potential Aerodynamic Effects on Personnel and Equipment in Proximity to High-Speed Train Operations (FRA 1999), based on reviews of both the theoretical and experimental data available at the time, made conclusions on induced winds for trains with speeds of 150 mph or less. The document concludes that at a distance of 26 feet from a train traveling at 150 mph, the induced wind would be in the range of 10 mph to 40 mph.

It states, “The moving HST would induce airflow in its immediate proximity. The speed of the induced airflow can be high near the passing train but drops off sharply a short distance away

2.German Intercity Connect HST data--Using the relationships from the German Intercity Connect HST data, induced winds from an HST traveling at 220 mph would be expected to range from 11 mph to 22 mph at approx. 10 feet from the train. It also includes a discussion of the relevance of incomplete or unavailable information to evaluating potential impacts.

The FEIR does not address the cumulative impacts of induced wind during operation. It does not take into consideration the current wind speeds in the location the HST is traveling through. Therefore, winds will be at cumulative higher speed than this report suggests. To simplify, the true wind speed should be more closely calculated considering : (Operational train induced wind speed + existing wind speeds /existing environmental wind conditions) Analysis of the cumulative impacts of both HST speeds and existing environmental wind conditions needs to be re-evaluated . They were not adequately addressed in the FEIR.

When looking at the information from the SJVAPCD website that states that Valley Fever cocci-containing dust particles can become airborne at wind speeds ranging from 13-22 mph, It appears that cocci spores may be spread simply by an operational HST alone. However, the cumulative impact of existing wind conditions coupled with HST induced winds, may further enhance the potential spread of cocci-containing dust particles. It should be noted also that the HST will not always be traveling at 220mph as it enters urban areas and makes station stops. That said, it should also be noted that the wind impacts of various train speeds were not adequately addressed in the FEIR.

While still discussing this topic, it is important to note that the FEIR refers to Standard Response FB-Response 27 for a discussion of dust from train operations. It states that fugitive dust from the elevated HST tracks will not have a replenishable source of particulate matter silt-loading on the structures. The height of the elevated structures will likely be sufficient to have any induced winds dissipated sufficiently not to stir up any fugitive dust from the ground. Therefore, the dust associated with the elevated train would not result in a significant amount of fugitive dust to be dispersed onto nearby receivers. While that may be true, it should be noted that the amount of dirt that will need to be disturbed during the construction period due to the intensive construction necessary to erect huge viaduct structures for the elevated train will create adverse dust impacts during construction. The dust and emissions from digging, grading, and the operations of multiple concrete batch plants along the approximately 12 mile span of elevated viaduct proposed for urban Bakersfield will be significant. The soil/dust disturbances along these types of construction segments could render the population at risk for Valley fever exposure due to the greater disturbance of the soils in the construction areas.

The FEIR should have included an exclusive section in the FEIR/FEIS dedicated to researching Valley Fever issues and specific mitigations necessary for the Fresno-Bakersfield section. Instead, soil disturbances, watering practices, induced winds, and weather patterns influencing the spread of Valley Fever spores were completely ignored. The HSRA and the FRA deprived the public from meaningful discussion, comment and resolution of a very serious issue.

Until scientists and researchers develop better methods to prevent spread, the Valley is at risk. In recent years, mitigations have been proposed by various organizations in an effort to improve existing mitigations for large construction projects that would minimize potential Valley Fever spore exposure to both workers and surrounding landowners . I see no inclusion of any of these mitigations in the FEIR/EIS. I refer the reader to specific Valley Fever mitigations proposed by the CA Dept. of Public Health, as well as for another large project in Kern County (also supported by Federal funding) : The HECA project.

http://docketpublic.energy.ca.gov/PublicDocuments/08-AFC-08A/TN200476_20130913T162653_Sierra_Club's_Comments_on_the_Preliminary_Staff_Assessment_P art.pdf

The reality is that there has not been a construction project of this size in the Valley since the building of Interstate Highway 5. At that time not as much was known about Valley Fever and its spread.

Luckily, Highway 5 was constructed in an isolated area of the valley where few people live. The problem is that the currently proposed project goes through both rural and urban areas at speeds that can change dust patterns and disturb valley fever spore hotspots. The soil work and construction activities create major adverse environmental impacts. Operational HSR brings adverse noise , visual and vibration impacts that will alter the Valley lifestyle. The need to protect the Valley and to preserve the richest farmland in the U.S. should come before an unnecessary project that our State cannot afford. Monies could be spent more wisely on developing adequate water resources or on education.

Knowing the risks and impacts, it is reasonable to expect that our government would adjust the project to protect the valley and its inhabitants. We all know that the high speed train technology currently proposed will likely be outdated by the time funding could ever be found to complete the plan.

It makes more sense to wait....realizing that the environmental impacts that have been uncovered are too great to support moving forward with the plan.

A better solution is to re-think the project entirely and focus ARRA funds on upgrading the current Amtrak system, making it a high speed train system (but likely lower speed- less than 150 mph) with focus on adding grade separations and finding the least environmentally impactful alignment through either the Tehachapi or Tejon pass . It could follow the existing ROW in the valley. Funds could aid to promote the San Joaquin Joint Powers Authority in fulfilling its vision to expand the current Amtrak system along the San Joaquin corridor.

Most of us in the valley would be happy with a faster Amtrak train system that connects to Los Angeles. A project like that would be cheaper and would give us positive environmental benefits much faster than the currently proposed HSR project and its ill-conceived alignments through the San Joaquin Valley . It is still largely unknown where the money will come from to finance the HSR project and it is a very real possibility that it will never be completed. We will have ended up with a faster Amtrak system that still ends in Bakersfield---having left a minefield of adverse environmental impact to farmlands , rural and urban areas and the general population as a whole.

Thank you for allowing me to comment on the FEIR. I strongly urge you to wait to certify the plan until further evaluations are complete and all other alternatives for ARRA funds are reviewed. Any VERA currently being negotiated must include specific guidelines and Valley Fever mitigation measures.

Sincerely,

Carol Bender



Please see attached pages with more links to references and notation about links.

CORRESPONDENCE: From: Antje Lauer <alauer@csub.edu>

To: cmbdoll <cmbdoll@aol.com>

Sent: Thu, May 1, 2014 4:53 pm

Subject: Re: Inquiry Valley Fever Concerns Kern County

Dear Mrs Bender,

you are welcome to use the following comment which is valid for Kern and Fresno County and any other county where cocci is established:

The currently used method of moistening soil with water prior to disturbance during construction is successful in reducing dust emission for the time the construction workers are disturbing the soil. However, the water needs to penetrate deep into the soil to avoid dust emission from deeper layers. Also, the disturbed soil might not be moistened over the weekends and when construction is complete, but the disturbed soil (without any vegetation cover) will likely increase dust emission for months or years after the disturbance. This is actually a problem in the Antelope Valley area, where large areas of soil were disturbed and then, management did not continue. The worst scenario would be if the workers are moistening soils that are a 'hot-spot' of the pathogen (strong growth site) and thereby supporting its growth, increasing the number of spores developing in the soil, once it dries up again, after construction is complete. The High Speed Rail Authorities state that the dust emission will be insignificant during construction, which might or might not be true (i doubt that they have done work to support their statement). What worries is more what happens later with these disturbed soils.

Sincerely,

Antje Lauer

California State University at Bakersfield

Department of Biology

Science 1 / room 310

9001 Stockdale Highway

Bakersfield, CA 93311 USA

phone: +001 (661) 654-2603 FAX: +001 (661) 654-6956

INTERNET LINKS TO REFERENCE MATERIALS : COCCIDIOIDOMYCOSIS EPIDEMIOLOGY/MITIGATION

1. The Epidemiology of Coccidioidomycosis—15 county study:

https://www.vfce.arizona.edu/resources/pdf/The_Epidemiology_of_Coccidioidomycosis_%20Collaborative_County_Report.pdf

2. Coccidioidomycosis An Enduring Work-Related Disease:

<http://blogs.cdc.gov/niosh-science-blog/2014/04/23/coccidioidomycosis/>

Coccidioides is found in soil, commonly about 2–12 inches beneath the surface [Pappagianis 1988; Fisher et al. 2000]. The organisms can be irregularly distributed within a given area. The fungus forms arthrospores, or spores, that can get into the air and travel over long distances when soil is disturbed naturally, such as by wind, or when it is disturbed by human activities such as construction. People can get coccidioidomycosis after inhaling the airborne spores [CDC 2013a]. It has been suggested that human illness could be caused by a single spore [Pappagianis 1988; Galgiani 1993].

Anyone living in an endemic area can be exposed to airborne Coccidioides spores and thus, is at risk for coccidioidomycosis. Workers in endemic areas who are exposed to dusty conditions related to soil disturbance are thought to be at higher risk for coccidioidomycosis [CDC 2013a; CDPH 2014]. Examples include:

- Agricultural workers
- Construction workers
- Archeological workers
- Military personnel/trainees
- Wildland firefighters
- Workers in mining, gas and oil extraction jobs

People at greater risk for developing disseminated infection include people of African American and Asian (particularly Filipino) descent, pregnant women during their third trimester, and immunocompromised persons [CDC 2013a]. Coccidioidomycosis has been shown to be costly and debilitating, with nearly 75% of patients in whom the disease has been recognized missing work or school because of their illness and more than 40% requiring hospitalization [Tsang et al. 2010].

In May 2013, the Health Hazard Evaluation (HHE) Program received a request from managers on behalf of employees at two state agencies. They were concerned about exposure of over 2,800 employees to *Coccidioides* at two state prisons (prison A and prison B) in the Central Valley of California.

***Efforts to reduce exposure to dust from prison ground sources already included wetting soil before soil-disruption activities, reducing soil disking (shallow plowing), applying a soil stabilizer (a type of soil cement), and planting grass and other vegetation. We were not able to evaluate the effectiveness of these efforts at the prisons.

3. California Department of Public Health (CDPH) [2014]. Preventing Work-Related Valley Fever (Coccidioidomycosis) <http://www.cdph.ca.gov/programs/ohb/pages/cocci.aspx>.
4. Centers for Disease Control and Prevention (CDC) [2013a]. Coccidioidomycosis. <http://www.cdc.gov/fungal/coccidioidomycosis>
5. Centers for Disease Control and Prevention (CDC) [2013b]. Increase in reported coccidioidomycosis —United States, 1998–2011. MMWR 62(12):217–221.
6. Centers for Disease Control and Prevention (CDC) [2014]. CDC health information for international travel 2014. New York: Oxford University Press.
7. Chiller TM, Galgiani JN, Stevens DA [2003]. Coccidioidomycosis. Infect Dis Clin N Am 17(1):41–
8. Fisher F, Bultman MW, Pappagianis D [2000]. Operational guidelines for geological fieldwork in areas endemic for coccidioidomycosis (valley fever). U.S. Geological Survey Open-File Report; U.S. Department of the Interior: Washington, DC, pp. 1–6.
9. Galgiani JN [1993]. Coccidioidomycosis. West J Med 159(4):153–171.
10. Galgiani JN, Ampel NM, Blair JE, Catanzaro A, Johnson RH, Stevens DA, Williams PL [2005]. Coccidioidomycosis. Clin Infect Dis 41(9):1217–1223.
11. Pappagianis D [1988]. Epidemiology of coccidioidomycosis. Curr Top Med Mycol 2:199–238.
12. Tsang CA, Anderson SM, Imholte SB, Erhart LM, Chen S, Park BJ, Christ C, Komatsu KK, Chiller T, Sunenshine RH [2010]. Enhanced surveillance of coccidioidomycosis, Arizona, USA, 2007–2008. Emerg Infect Dis 16(11):1738–1744.

13. Kern Co. HECA Project Mitigation Valley Fever—Sierra Club

http://docketpublic.energy.ca.gov/PublicDocuments/08-AFC-08A/TN200476_20130913T162653_Sierra_Club's_Comments_on_the_Preliminary_Staff_Assessment_Part.pdf

14. The JUST ONE BREATH SERIES : <http://www.reportingonhealth.org/valleyfever>

15. <http://www.bakersfieldnow.com/news/local/Inmates-sue-California-over-valley-fever-exposure-215293661.html> Discusses prison exposure--inmate sues infected VF in Kern Co. (Taft Correctional Facility)

16. The Epidemiology of Coccidioidomycosis in Six California Counties, 2011.

[http://www.co.fresno.ca.us/uploadedFiles/Departments/Public_Health/Divisions/CH/content/CD/content/Epidemiology/2011/Epi%20of%20Cocci%20in%206%20Counties%20\(3\).pdf](http://www.co.fresno.ca.us/uploadedFiles/Departments/Public_Health/Divisions/CH/content/CD/content/Epidemiology/2011/Epi%20of%20Cocci%20in%206%20Counties%20(3).pdf)

17. More excerpts from Dr MacLean, M.D Kings County: The Epidemiology of Coccidioidomycosis in 15 California Counties 2007-2011

https://www.vfce.arizona.edu/resources/pdf/The_Epidemiology_of_Coccidioidomycosis_%20Collaborative_County_Report.pdf

a. The annual reported cases usually refer to newly recognized coccidioidomycosis. However, the fact that this disease can be chronic means that active disease reported in a given year continues beyond that year leading to significant cumulative numbers of active cases not included in the annual reporting.

b. Employees as well as inmates are subject to infection.

c. The varying degrees of severity of coccidioidomycosis are based on factors such as ethnic derivation, underlying medical conditions (diabetes mellitus, chronic pulmonary disease).

d. There is uncertainty as to the duration of currently available treatment, and related relapses.

e. Certain forms of the disease necessitate years (and possibly a lifetime) of medical management, e.g. with meningitis or synovitis.

f. Certain forms of the disease necessitate drastic surgical procedures, e.g., in disseminated coccidioidomycosis involving the spine.

g. There is concern about the availability of appropriate follow-up and possible prolonged treatment after discharge of inmates from prison."

Hospitalization rates in Kings County are somewhat unstable due to small numbers. For example, the population of Kings County is only 19% that of Kern. The high incidence of inmate cases may influence the hospitalization rate in Kings County.

The 15 participating counties include all of the San Joaquin Valley counties except Madera; all of southern California except Orange and Imperial; and all the central coastal counties. These 15 counties reported 16,843 cases during the five year period, 2007-2011. Forty six percent of these were reported in Kern County. Four of the top five counties by reported number of cases are located in the San Joaquin Valley. These four counties along with San Luis Obispo are the top five counties by incidence rate. A substantial number of the remaining cases were reported in counties outside the San Joaquin Valley.

The top five counties by mean incidence rates in 1991-1993 were Kern, Tulare, Kings, San Luis Obispo and Monterey. Three of the counties had higher incidence rates observed than in the current study: Kern 384/100,000; Tulare 77/100,000; and San Luis Obispo 60/100,000.

Race is known to be a risk factor in coccidioidomycosis outcomes. The risk of dissemination in people of African or Filipino decent is accepted. The estimates of excess risk vary but for both groups are almost certainly increased by a factor greater than five.

(Page 27 of 61) When looking at all of California, relative to non-Hispanic whites, African-Americans had two and a half times the risk of being hospitalized. Asians/Pacific Islanders in California had only 80% of the risk of being hospitalized compared to non-Hispanic whites. The risk of hospitalization of Asians/Pacific Islanders was 1.62 times that of the reference whites when only the residents of Kern, Tulare, Kings and San Luis Obispo were studied.[12]

The observed lower risk of hospitalization among California's Asian/Pacific Islanders noted above likely reflects their under-representation in the most endemic areas. In highly endemic counties their risk of hospitalization is higher than non-Hispanic whites

Sondermeyer, et al defined six counties as endemic: Kern, Tulare, Kings, Fresno, Madera and San Luis Obispo. For the period 2000-2011, these counties were the county of residence for 48.8% of the initial hospitalizations in California. [26] For the same period these six counties accounted for 76% of the reported cases in California.[2,4,5]

****Beginning in 1995 Coccidioidomycosis (CM) became a nationally notifiable disease. Various surveillance systems provide surveillance data to the CDC. CM wasn't included in this system in 2010.**

Luckily, Highway 5 was constructed in an isolated area of the valley where few people live. The problem is that the currently proposed project goes through both rural and urban areas at speeds that can change dust patterns and disturb valley fever spore hotspots. The soil work and construction activities create major adverse environmental impacts. Operational HSR brings adverse noise, visual and vibration impacts that will alter the Valley lifestyle. The need to protect the Valley and to preserve the richest farmland in the U.S. should come before an unnecessary project that our State cannot afford. Monies could be spent more wisely on developing adequate water resources or on education.

Knowing the risks and impacts, it is reasonable to expect that our government would adjust the project to protect the valley and its inhabitants. We all know that the high speed train technology currently proposed will likely be outdated by the time funding could ever be found to complete the plan.

It makes more sense to wait....realizing that the environmental impacts that have been uncovered are too great to support moving forward with the plan.

A better solution is to re-think the project entirely and focus ARRA funds on upgrading the current Amtrak system, making it a high speed train system (but likely lower speed- less than 150 mph) with focus on adding grade separations and finding the least environmentally impactful alignment through either the Tehachapi or Tejon pass. It could follow the existing ROW in the valley. Funds could aid to promote the San Joaquin Joint Powers Authority in fulfilling its vision to expand the current Amtrak system along the San Joaquin corridor.

Most of us in the valley would be happy with a faster Amtrak train system that connects to Los Angeles. A project like that would be cheaper and would give us positive environmental benefits much faster than the currently proposed HSR project and its ill-conceived alignments through the San Joaquin Valley. It is still largely unknown where the money will come from to finance the HSR project and it is a very real possibility that it will never be completed. We will have ended up with a faster Amtrak system that still ends in Bakersfield—having left a minefield of adverse environmental impact to farmlands, rural and urban areas and the general population as a whole.

Thank you for allowing me to comment on the FEIR. I strongly urge you to wait to certify the plan until further evaluations are complete and all other alternatives for ARRA funds are reviewed. Any VERA currently being negotiated must include specific guidelines and Valley Fever mitigation measures.

Sincerely,

Carol Bender R.N., P.H.N.



A handwritten signature in cursive script, reading "Carol Bender R.N. P.H.N.", written over the redacted area.

Brown's HSR Bail-Out

Governor Brown's misguided attempts to reconfigure High Speed Rail funding are fraught with damaging consequences.

Reading between the lines: If Brown implements Cap&Trade funds to pay for HSR's initial segment, fines paid by the state's worst polluters would virtually bail-out HSRA from its self-inflicted predicament – the loss of Proposition IA money. That would leave the authority forever indebted to certain corporations. It also releases HSRA from Proposition IA's fiscal safeguards and provisions, leaving us with a deregulated project, discreetly tied to discredited companies. That is hardly consistent with voters' original intent as defined in Proposition IA --The 2008 law that allowed HSRA to "set up shop", collect salaries, and spend millions.

Moreover, Cap&Trade would be funding a project identified, by the state Legislative Analyst Office, as a net polluter for 30 years. Note that environmental groups have been challenging Brown all along for irregularities with cap & trade allocations. If Cap&Trade jumpstarts HSR, Brown's "Rainy Day Fund" could become a safety net for the project, extending the bailout indefinitely.

Attempts to salvage this botched project would have insidious effects on our state economy for generations to come.

*Cheryl Lynn Smith
Presented at Board Meeting
on 5-6-2014*



May 5, 2014

Steven A. Nelsen
Mayor

Fresno to Bakersfield Final EIR/EIS Comment
California High Speed Rail Authority Board
770 L Street, Suite 800
Sacramento, CA 95814

E. Warren Gubler
Vice Mayor

Gregory F. Collins
Councilmember

Subject: City of Visalia Support for Fresno to Bakersfield Final EIR/EIS Preferred Alternative

Bob Link
Councilmember

Dear Chairperson Richard and Authority Board Members:

Amy Shuklian
Councilmember

On behalf of the City of Visalia, I would like to express our support for the High Speed Rail Authority's approval of the Preferred Alternative route East of Hanford and the future Kings-Tulare station location near the juncture of State High 198 and State Highway 43. The Final EIR/EIS identifies the Preferred Alternative as including a regional station that runs east of Hanford, between Hanford and Visalia. The City believes this alternative provides far better accessibility for not only our residents but also those of many Tulare County communities.

In addition, while the Kings-Tulare Regional Station is to be built when travel demand warrants it we strongly believe the construction of this regional station is fully justified and critically needed as early in the High Speed Train project as possible. This conclusion is supported by a number of reasons, some of which include:

Strong Regional Population Growth: The Kings-Tulare regional population is currently at approximately 600,000 residents and is expected to grow to 1 million by 2030.

Regional Relationship to California: Although the Kings-Tulare region is situated almost in the geographical center of the State, the long driving distance to urban centers combined with increased congestion on state highways make this region remote. This remoteness restricts access to educational opportunities, medical specialties, and other benefits typically found in highly urbanized areas.

Station Accessibility: The distance between Fresno and Bakersfield is 115 miles. If the Kings-Tulare Regional Station is not built, this will be the longest segment without a station in the entire system. The hundreds of thousands of residents and

business owners in our region would be forced to drive 40-50 miles on average to access this system of mass transportation.

Regional Air Quality Benefits: A primary benefit of high speed rail is the improvement to regional air quality as travelers switch from personal vehicle to train transportation. This benefit is extremely important to our region as according to a report from the Environment California Research and Policy Center, the Visalia/Porterville/Tulare MSA has the second most polluted air in the United States. We too depend on getting more travelers out of cars and into mass transit.

Gateway to Sequoia-Kings Canyon National Park: The Kings-Tulare Regional Station will serve as a major gateway for many visitors to the Park. With regional transit connecting Visalia to the Kings-Tulare Station and shuttle service to and within the Park from Visalia, visitors from outside the region will be able to access the Park via high speed rail and regional transit without having to use a personal vehicle.

Economic Revitalization: The business climate in the region currently lags behind the major urban centers of California. High speed rail can help stimulate the local economy by making educational and training opportunities available in these urban centers more accessible, and by increasing the interconnectivity of business between the region and the rest of California.

Regional Ridership Support: Amtrak's San Joaquin Line extends through the San Joaquin Valley between Los Angeles and San Francisco/Sacramento. The San Joaquin Line is the 5th busiest rail corridor in the United States. In June 2011, Hanford ranked 4th among the 16 stations along the route.

Strong Transit Growth: In the 2000-01 FY, annual ridership for Visalia Transit, the region's largest mass transit system, was approximately 1.2 million riders. For the 2012-13 FY the annual ridership was over 1.8 million yielding a 50% increase. This upward trend is expected to continue as mass transit remains convenient and financially competitive to personal vehicle travel.

Regional Transit Connectivity: Investments in high performing, interconnected regional bus transit systems have been necessary to meet the transit demands of each community in the region. This comprehensive system utilizes SR 198 as a backbone for delivering service throughout the region. Because the Kings-Tulare Regional Station will be situated along SR 198 between Hanford and Visalia it will be conveniently accessible to all communities in the region.

Transit Oriented Development (TOD): Since the Kings-Tulare Regional Station will leverage an interconnected network of downtown transit centers in the region, the benefits of TOD will be felt in each community. Comprehensive transit service is a cornerstone of TOD, thus cities in the region will use the Kings-Tulare Regional Station as a key feature in the establishment of future TOD in their respective city.

Again, the Preferred Alternative's east of Hanford alignment includes the potential Regional Station in a location far more accessible to Tulare County residents than other

route options. For this reason, the City supports the approval of the Preferred Alternative route and station locations as put forth in this final EIR/EIS.

Thank you for considering the interests of the City of Visalia and our region. Should you have any questions please feel free to direct them to our Economic Development Manager, Devon Jones at devon.jones@ci.visalia.ca.us or (559) 713-4190.

Sincerely,

A handwritten signature in blue ink, appearing to read "Steve Nelsen", with a stylized flourish at the end.

Steve Nelsen, Mayor
City of Visalia

COOPER FARMS, INC.
Gregory G. Cooper
Timothy J. Cooper
P.O. Box 97
Corcoran CA 93212

August 20, 2012

Fresno to Bakersfield Revised Draft EIR/Supplemental Draft EIS comment
770 L Street
Suite 800
Sacramento, CA 95814

Dear Sirs:

We operate a 300-acre farm located adjacent to Hwy 43, just North of Ave 144 about 3 miles South of Corcoran in Tulare County. (Sec 31 Township 21 Range 23). This ranch has been owned and operated by our family since 1955. We also own and farm 125 acres on Hwy 43 bounded on the North by Ave 128. (Section 16 Township 22 Range 23)

Located on the 300-acre parcel are three residences, an office and three shop buildings. The property is all underground pipelined with valves for flood irrigation. The fields have been leveled to irrigate south. Each residence has a domestic well and there are three deep wells on the property.

HSR BYPASS ROUTE

This proposal, as we understand it, would roughly run through the middle of the 300-acre ranch cutting across ~~the~~ ⁵ underground pipelines, isolating the West side of the ranch. Pipelines, access roads and return systems would have to be relocated at great expense. Fields would have to be releveled and some parcels would be un-farmable. This route would come within 150 feet of one of the residences perhaps making it uninhabitable. The proximity of the tracks to the other residences would greatly lower their value.

EXISTING RAILROAD ROUTE

This route, as we understand it, calls for routing of traffic around a residence located on Ave 144 into an overpass at Ave 144 and Hwy 43 creating 2 small parcels which would be impossible to farm. It would greatly impact an existing residence and pomegranate orchard greatly lowering the property value. It would also divert traffic along the East Side of the ranch North then West to an overpass/ intersection at Hwy 43. This would necessitate the relocation of a residence, office and shop buildings. The proposed relocation of Hwy 43 further east into our ranch would, along with this overpass/intersection, create small parcels impossible to farm. Relocation of domestic wells and utilities service could become necessary. An overpass/intersection at Ave 128 and Hwy 43 would take 20 acres of our ranch there.

In conclusion, we are convinced that these proposed HSR routes would have a severe negative impact on our farming operation and our way of life, perhaps to the point that we can no longer live or farm here.

Sincerely,

Gregory G. Cooper
Owner/Operator

Timothy J. Cooper
Owner/Operator



P.O. Box 8014 Wasco, CA 93280
Office: 661.758.2455
Fax: 661.758.0457



May 6, 2014

California High Speed Rail Authority
770 L Street, Suite 800
Sacramento, California 95814
fresno_bakersfield@hsr.ca.gov

RE: Final Environmental Impact Report/Environmental Impact Statement (Final EIR/EIS) for the Fresno to Bakersfield Section of the High Speed Rail Project

Members of the High Speed Rail Authority Board of Directors:

Lester Neufeld and Son and Neuhouse Farms appreciate the opportunity to review and comment on the Final EIR/EIS for the Fresno to Bakersfield segment of the High Speed Rail Project issued by the High Speed Rail Authority (HSRA). Our farming entities produce almonds, roses, and carrots in the Wasco area.

We wish to voice our support for the BNSF Alignment in the Wasco-Shafter area as being the preferred alternative, as opposed to the ByPass Alternative, as it best suits the community and the desires of the stakeholders in our community. The BNSF Alignment is the best choice as it has reduced impacts on agricultural land, commercial and industrial uses, oil and gas production, and makes the best use of the existing infrastructure.

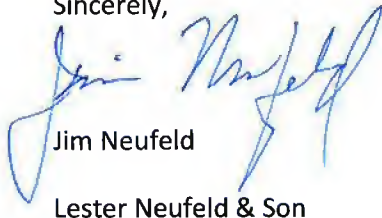
The Final EIR/EIS responds to comments submitted on the Draft EIR/EIS in that it in many cases addresses the realities of, and the impacts high speed rail will have on that community. There are several areas that demonstrate this:

- Wetlands – the Final EIR indicates that “it is noteworthy that none of these waters are wetlands and are instead man-made features installed in uplands for agricultural purposes, such as irrigation return-flow detention basins and irrigation canals (see Section 3.7, Biological Resources). It is equally important that these man-made features are in poor condition for aquatic habitat and that the functions and services provided by these aquatic features can be restored by rerouting canals and ditches or by creating additional capacity in detention basins.” This is a case where further research pointed to the fact that the By Pass was not the “preferred alternative” when it came to wetlands as a deciding factor.

- Setbacks – There was a recognition that beyond the edge of the right of way, there is an area where farmland will be taken out of production because farmers need an area in which to turn their equipment around – a constraint created because of HSR. Mitigation is now proposed for this area – albeit smaller than what we think is appropriate, but yet recognized.
- Bifurcation of Farmland Diagonally – due to this approach, if the By Pass Alternative had been chosen, the largest two impacts would have been to the irrigation systems and equipment movement. Bisecting an irrigation system will be very costly as you essentially will have to have two systems designed and replicated – at a huge cost. Equipment movement is acknowledged in the Final EIR and the fact that movement will add one to two miles of additional driving one way. The Final EIR/EIS inappropriately downplays the hardship associated with the additional use of labor, fuel and wear and tear on equipment.
- Remnant Parcels – The Final EIR/EIS recognizes that remnant parcels will be created and many will not be economically viable. It also recognizes that it will be challenging to individual landowners as they will likely want to sell the remnant parcel to the farmer across the tracks closest to the parcel that is now un-useable to him/her. The subdivision map act will make this problematic and the Authority has created their Farmland Consolidation Program to either purchase the remnant parcel or work through the process with the landowner.
- Oil and Gas Wells - In the Wasco-Shafter area, there is the added “feature” of oil and gas wells. Not only does the By Pass Alternative go through an existing oil field that is heavily populated with oil and gas wells, but the advent of hydraulic fracturing will only add to the cost, safety, and relocation uncertainties associated with constructing the project in an existing and rapidly expanding oil field if placed on the By Pass Alternative, making the BNSF the preferred choice.
- Bees and Pollination - Protection of the bees and the quality of the environment for them is of utmost importance. The research fund to be set up to further explore the impacts of high speed rail related to wind, noise and dust is certainly appropriate.

In the Wasco-Shafter Area, we support the conclusions of the Final EIR/EIS that the superior alternative in our area is the BNSF Alignment.

Sincerely,



Jim Neufeld

Lester Neufeld & Son



PARAMOUNT

FARMING

Via email and electronic submission

May 5, 2014

California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814
fresno_bakersfield@hsr.ca.gov

RE: Final Environmental Impact Report/Environmental Impact Statement (Final EIR/EIS) for the Fresno to Bakersfield section of the High-Speed Rail project

Members of the High Speed Rail Authority Board of Directors:

Paramount Farming Company (Paramount) appreciates the opportunity to review and comment on Final Environmental Impact Report/Environmental Impact Statement (Final EIR/EIS) for the Fresno to Bakersfield section of the High-Speed Rail project issued by the High Speed Rail Authority (HSRA). Paramount and its related entities farm and process almonds, pistachios, citrus and pomegranates in California.

First, Paramount again voices its support for the BNSF Alignment, as opposed to the Bypass Alignment, because the BNSF alignment has reduced impacts on agricultural land, existing and planned commercial and industrial uses, and allows for the most efficient use of existing infrastructure. We also would like to thank the HSRA staff for their work with us and other stakeholders regarding these important alignment issues.

As you may know, Paramount has agreed to donate a portion of its property to the County of Kern if the Shafter location is chosen for the Heavy Maintenance Facility (HMF). While we understand that a decision will be made at a later date regarding the location of the HMF, the EIR does not accurately reflect a number of facts involving the potential sites for the HMF.

With regard to the Kern Council of Governments - Shafter West (Shafter West), there are only 150 acres of FEMA designated 100-year floodplain on that site, as contrasted with the 175 acres noted in the EIR, and we question whether that designation is even appropriate. The area was not included in the floodplain map prior to 2008, and is not known to flood during significant rain events. For these reasons, we plan to work with FEMA to get this designation removed. In addition, we think it should be noted that the Shafter West site is currently in agricultural production with no existing structures, and thus would not require significant preparation work

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California High-Speed Rail Authority
May 5, 2014
Page Two

to be utilized for the HMF. Finally, location of the Shafter West site at the end of the Valley would allow greater testing capability than other sites located in the middle of the Valley.

In the discussion of the Fresno Works – West site, we think it should be noted that this site will require significant remediation and preparation work for it to be utilized for the HMF because it has been in industrial use.

Finally, Paramount supports the comments submitted on October 18, 2012 by the Greater Bakersfield Separation of Grade District regarding Santa Fe Way, 7th Standard Road and the West Beltway (Comments L022-2, L022-3 and L-022-4). Ensuring that impacts to these roadways are properly mitigated is critical to the transportation infrastructure in the area.

Thank you for your consideration.

Sincerely,

A handwritten signature in blue ink, appearing to read 'W. D. Phillimore', with a stylized flourish at the end.

William D. Phillimore
Executive Vice President

May 6, 2014

Good afternoon/Good evening. Welcome to the Central Valley to those California High-Speed Rail Authority Board members who were not at the meeting held in this same location at Fresno City Hall in April 2013. My name is Shelli Andranigian. I am a native Californian born and raised in Fresno County.

It was three years ago this month that I attended a meeting at Kit Carson School in Hanford, California to support those who had homes, businesses and farms in the path of the California High-Speed Train. Although I have always loved trains and have been on high-speed ones in Europe, I didn't like the way these individuals in Kings County were being treated. While there looking at maps and speaking with those representing the interests of the California High-Speed Rail Authority, I inadvertently found out our family farm was also in the proposed path. The train was not only traveling in the middle of our Pluot orchard in South Fresno County, there was also a "temporary" construction site a quarter mile behind our family home. Our ranch just across California Highway 43 was also negatively impacted. Both of these properties, which are next to the lush and majestic Cole Slough of the Kings River, remain so (negatively impacted) today.

A letter discussing the impacts (which include air, land and water) of the California High-Speed Rail on our family business was written to then Chairman Umberg in October 2011 on behalf of the Andranigian Family and Andranigian Farming. This letter and the responses to it were "inadvertently omitted" (the Authority's words not mine) out of the Final (EIR/ EIS) just issued in April 2014. I was not the only one that received a letter via Fedex last week to let me know. I brought the letter from the CHSRA's Director of Environmental Services Mark A. McLoughlin with me today. There is also a cc on the letter: Ms. Stephanie Perez, PG, Office of Railroad Policy and Development, Federal Railroad Administration. This omission was also referenced at the CHSRA website: **Volume VI: Letters Inadvertently Omitted from Volumes IV & V and Errata (Posted May 2, 2014)**

An "Errata" is defined as an error in printing or writing according to Webster's Dictionary.

Letters omitted aside from mine included those from Tule River Association (association of water districts), Tulare Lake Basin Water Storage District, California Rural League Assistance, Inc; Citizens for California High Speed Rail Accountability (CCHSRA) (of which I am also a board member), First Free Will Baptist Church, Fowler Packing Company, Kings County Farm Bureau, Korean Presbyterian Church, MEL's Farms, Mercy Hospital in Bakersfield, Trini's Oil Inc. and Union Pacific Railroad.

Based on these omissions alone, you are not ready to take action tomorrow.

Page 2

I'd like to know why is it so critical to build a high-speed rail system in California when the resources are not there, the legal issues large and the surrounding environmental issues yet to be resolved. Rushing and doing a lousy job that will need to be corrected is not the proper way to build any infrastructure project. Especially one that is supposed to pave the way for all future high-speed rail systems in America.

Please note I am also here today to represent those who have farms but were not able to make it to this meeting as the harvest season has started. Those who feed and clothe the world work 24/7 to do so...especially during harvest.

Thank you in advance for your consideration of doing what is proper for those in the proposed paths whose lives and livelihoods will be forever altered by your actions this week as well as in the coming months and years. Your goal should be that those in the pathway would not forever negatively be altered by your actions.

I leave you with a favorite passage from the Bible: Proverbs 6:7 --

Determination to be wise is the first step to becoming wise and with your wisdom develop common sense and good judgment.

Thank you and safe travels,



Shelli Andranigian

On behalf of the Andranigian Family and Andranigian Farming

P.O. Box 752

Laton, CA 93242

Andranigianmedia7@att.net

Cc: Michael L. Farley, Esq.; Justin Fredrickson, California Farm Bureau; Ryan Jacobsen, Fresno County Farm Bureau; Diane Friend, Kings County Farm Bureau; Fresno County Board of Supervisors, Kings County Board of Supervisors, Citizens for California High Speed Rail Accountability (CCHSRA), Governor Jerry Brown, U.S. Senator Dianne Feinstein, U.S. Congressman Jim Costa, U.S. Congressman Jeff Denham, U.S. Congressman Doug LaMalfa, U.S. Congressman Alan Lowenthal, U.S. Congressman Kevin McCarthy, U.S. Congressman Devin Nunes, U.S. Congressman David Valadao, Senator Tom Berryhill, Senator Mark DeSaulnier, Senator Cathleen Galgiani, Senator Jean Fuller, Senator Mark Leno, Senator Jim Nielsen, Senate President pro Tem Darrell Steinberg, Senator Andy Vidak, Assemblymember Frank Bigelow, Assemblymember Connie Conway, Assemblymember Diane Harkey, Assemblymember Shannon Grove, Assemblymember Bonnie Lowenthal, Assemblymember Jim Patterson, Assemblymember Henry T. Perea, Assembly Speaker John A. Perez, Assemblymember Rudy Salas



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April, 29, 2014

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CHIEF EXECUTIVE OFFICER

Ms. Shelli Andranigian
19500 S. Highland
Laton, CA 93242

Dear Ms. Andranigian:

The California High-speed Rail Authority and Federal Railroad Administration received your comments on the Draft Environmental Impact Report/ Environmental Impact Statement (EIR/EIS) for the Fresno to Bakersfield Section of the High-speed Rail Program. Thank you. Your comments were considered and a response to your comments was prepared. During the production process, your letter and the responses to it were inadvertently omitted from the Final (EIR/EIS). Your comment letter and a response are enclosed.

Thank you for taking an interest in the project and investing your time in submitting a letter with your comments. I am sorry if this accidental omission caused any confusion. If you have any questions please contact the Authority at (866) 761-7755 or fresno_bakersfield@hsr.ca.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark A. McLoughlin", with a long horizontal line extending to the right.

Mark A. McLoughlin
Director of Environmental Services

Enclosure:
Comment letter and its Response

cc: Ms. Stephanie Perez, PG, Office of Railroad Policy and Development, Federal Railroad Administration

EDMUND G. BROWN JR.
GOVERNOR





May 6, 2014

California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814
fresno_bakersfield@hsr.ca.gov

VIA E-Mail and Electronic Submission

RE: Final Environmental Impact Report/Environmental Impact Statement (Final EIR/EIS) for the Fresno to Bakersfield section of the High-Speed Rail project

Members of the High Speed Rail Authority Board of Directors:

I am writing this letter on behalf of South Valley Farms and appreciate the opportunity to review and comment on the Final EIR/EIS for the Fresno to Bakersfield section of the High-Speed Rail project. South Valley Farms has operations in Kern County, primarily in the Wasco and Shafter areas, farming almonds and pistachios and processing almonds. As we work through this EIR/EIS process, we have appreciated the courtesy and willingness to discuss issues shown by your staff, particularly Mark McLoughlin, Diana Gomez, and Jeff Morales. Upon review of the Final EIR/EIS, it is clear that many of our concerns and issues have been addressed, and we write this letter in support of the BNSF alignment as the preferred alternative by reducing impacts on agricultural land and other uses in the area, and utilizing existing infrastructure.

Bifurcating farmland on a diagonal alignment creates hardships in terms of irrigation systems and re-routing of access for related farm equipment. The By-Pass alignment creates more of such diagonal bifurcation than the BNSF alignment and creates more hardship. Therefore, the BNSF alignment contains less associated impacts and minimizes the associated coordination and negotiations incumbent with such bifurcation. However, the EIR/EIS should go further to address hardships with regard to farm equipment access where bifurcation occurs along the selected alignment.

Furthermore, how the draft EIR/EIS dealt with wetlands was a large concern for many agricultural landowners in the Wasco and greater Bakersfield area, and staff was willing to hear various perspectives. Specifically, the previously identified wetlands are, in fact, man-made features installed for agricultural purposes with little to no value for aquatic habitat. The Final EIR/EIS recognizes this fact and appropriately acknowledges that, with respect to wetlands, both the By-Pass and the BNSF alignments are largely indistinguishable as to impacts.

Lastly, remnant parcels are created with the alignments. These remnant parcels exist in greater magnitude with the By-Pass alignment, creating approximately 300 acres of remnant parcels on land owned by South Valley Farms alone compared to 0 acres of remnant parcels for South Valley Farms with the BNSF alignment. While the BNSF alignment would not eliminate remnant parcels for all landowners, it significantly reduces the number of circumstances. We also recognize and appreciate the proactive steps recommended in the EIR/EIS to address remnant parcel circumstances and facilitate the necessary coordination process with landowners via the creation of the Farmland Consolidation Program.



SOUTH VALLEY FARMS

15443 Beech Avenue • Wasco, CA 93280 • Ph: 661.391.9000 • Fax: 661.391.9012 • www.southvalleyfarms.com

Again, we appreciate this opportunity to provide comments and staff's willingness to hear comments and work through issues. For reasons stated above, and others expressed in the Final EIR/EIS, we strongly recommend the BNSF alignment as the preferred alternative

Thank you for your consideration.

Sincerely,

A handwritten signature in blue ink that reads "W. Todd Turley".

W. Todd Turley
Land & Governmental Affairs Manager

May 6, 2014

SUBJECT: Comments on the Fresno to Bakersfield Section Final EIR/EIS

California High Speed Rail Authority Board Members:

A corridor aligned along Interstate 5 should be evaluated as an alternative, with a trunk and branch system utilized to serve San Joaquin Valley cities not directly on the alignment such as Fresno and Bakersfield. This issue had never been addressed in a factually accurate way in any California High Speed Rail Authority (CHSRA) environmental documentation, as explained below.

The CHSRA project-level environmental documentation that purports to address this alternative dismisses it with the single statement that "The concept of linking the I-5 corridor to Fresno and Bakersfield with spur lines was considered at the program level ...". This statement is factually inaccurate. The program level EIR/EIS did not independently evaluate the alternative of spur lines from an I-5 corridor (commonly referred to as a "trunk and branch" system) but instead referenced an earlier process that purportedly evaluated such an alternative, namely work by the CHSRA's predecessor body, the California High Speed Rail Commission (Commission). The CHSRA program level EIR/EIS does this in a single sentence (with no further explanation) as follows: "The Commission considered linking the I-5 corridor to Fresno and Bakersfield with spur lines but rejected this concept ...". Unfortunately this statement in the CHSRA program EIR/EIS is also factually inaccurate, as explained below. The simple fact is that a trunk and branch system utilizing an I-5 corridor alignment was never studied or evaluated by either the Commission or the CHSRA and is therefore not included in any of the environmental documentation.

The Commission's study of an I-5 corridor alternative was included in a document called a "Corridor Study" issued by the Commission in 1996. A copy of that document is attached as a part of these comments. A careful reading of that document reveals that although it does include an I-5 corridor alternative, that alternative does not include any spur lines whatsoever, let alone spur lines to Fresno and Bakersfield. In other words, the statement in the CHSRA program-level environmental document that spur lines from an I-5 corridor to Fresno and Bakersfield were "considered ... but rejected" is factually inaccurate, and thus statements in CHSRA project-level environmental documentation that such spur lines were "considered at the program level" is similarly and equally factually inaccurate.

Thus, one of the bedrock assertions of the entire environmental review structure for the current CHSRA route -- that spur lines from an I-5 corridor were evaluated as an alternative for serving Fresno and Bakersfield -- is fundamentally and wholly false and misleading and made with no supporting documentation (and is, in fact, contradicted by available documentation). Back in 1996, in the era of the Commission, train technology addressing the efficient operation of a high speed rail trunk and branch system was virtually nonexistent. Since then, due to the need for trunk and branch systems to efficiently serve all relevant markets, such as in France, technological improvements have occurred to specifically address the requirements of efficiently operating such systems.

Equally important, as the entire high speed rail system evolves over time, branches can themselves become interconnected so that the rail system becomes a true network instead of just a series of corridors. In this type of scenario, for California, what would start out as an I-5 corridor between the Bay Area and Los Angeles with branches serving the San Joaquin Valley could later include branches from the I-5 corridor trunk to the Central Coast, which would collaterally provide direct service between the San Joaquin Valley and the Central Coast, among other possibilities. Thus, it is highly possible that it is the I-5 corridor that is the optimum alignment for a true high speed rail network in the central part of the state, serving east-west as well as north-south travel. This is but another reason why a true evaluation of an I-5 corridor alignment alternative should be included in the Fresno to Bakersfield section Final EIR/EIS.

Thank you for consideration of these comments.

Steven Weil

Attachment: High Speed Rail Commission 1996 Corridor Study

CALIFORNIA HSR CORRIDOR EVALUATION AND ENVIRONMENTAL CONSTRAINTS ANALYSIS

By Paul Taylor,¹ Daniel S. Leavitt,² and Kip D. Field,³ Members, ASCE

(Reviewed by the Urban Transportation Division)

ABSTRACT: California is studying the feasibility of a statewide, high-speed rail (HSR) transportation system as a link between major cities in the northern and southern portions of the state. This system will complement the state's existing transportation system and serve as an alternative to air and auto travel. In this paper, the writers provide a condensed description of the findings and conclusions drawn from the 1996 California "High Speed Rail Corridor Evaluation & Environmental Constraints Analysis," which they prepared for California's Intercity High Speed Rail Commission to document and analyze the potential statewide HSR corridors.

INTRODUCTION

California is studying the feasibility of a statewide, high-speed rail (HSR) transportation system as a link between major cities in the northern and southern portions of the state. This system will complement the state's existing transportation system and serve as an alternative to air and auto travel. HSR is competitive with air travel in terms of speed and, like air travel, it connects cities that are 100–500 mi apart. Similar high-speed systems are in operation around the world; advances in rail technology have already allowed intercity rail systems in Europe and Japan to attain speeds of up to 186 mph.

The California "High Speed Rail Corridor Evaluation & Environmental Constraints Analysis" (1996) is one of five statewide studies. While the other four address HSR ridership, economic impacts, public participation, and financing options, this study was intended primarily to study high-speed corridors between Los Angeles and the San Francisco Bay area. The study also examined and evaluated options for extending the corridor to San Diego and Sacramento. This paper is an extract of that study; it documents the evaluation and analysis of the potential statewide HSR corridors and presents the findings and conclusions drawn from the complete study of engineering and environmental constraints.

TECHNOLOGY EVALUATION

The technology review was conducted to identify existing and emerging HSR technologies. No attempt was made to select a single technology or recommend a particular manufacturer. Instead, the technology candidates were segregated into three technology groups as a basis for establishing generic design criteria and simulating general performance characteristics for the California HSR corridors. Typical representatives from each group were identified to describe the technology types in a general way. The three technology groups were comparatively evaluated and generic criteria were established

for preliminary design (Table 1 summarizes the comparative evaluation of the three technology groups).

Because there are a number of HSR systems in service or under development throughout the world, the first step in their evaluation was to classify them by speed (both currently obtainable speeds as well as targeted speeds that may result from further research and development) and by similar design characteristics. In evaluating technology types for the California corridors, the HSR candidates were categorized into three general technology groups:

- High speed (HS)
- Very high speed (VHS)
- Magnetic levitation (Maglev)

The examination of available technologies within each of the technology groups (HS, VHS, and Maglev) confirmed that design criteria could be established to accommodate many candidate technologies simultaneously, while still remaining sensitive to California's physical features and limitations. Using those design criteria, the potential performance of each group was assessed by quantifying the approximate travel times and infrastructure costs. The following overall conclusions were made:

- Both the HS and VHS groups are viable technologies that have been proven in regular revenue service over extended periods of time.
- Each of the steel-wheel-on-rail speed groups has several mature candidates available for implementation. But while some HS equipment is in the United States, the most advanced equipment for the HS as well as the VHS technology groups is only available from manufacturers located abroad.
- While Maglev is an emerging technology with attractive characteristics, it has not yet been operated in high-speed revenue service and only limited data is available on construction and operations for this technology type.

METHODOLOGY

The analyses and reported results of the 1996 California "High Speed Rail Corridor Evaluation & Environmental Constraints Analysis" were divided into three phases whose methods and processes are described in the following sections. Each of these phases provided the Intercity High Speed Rail (IHSR) Commission with quantitative and qualitative data for determining which route has the highest potential HSR implementation.

¹Vice Pres., Parsons Brinckerhoff Quade & Douglas, Inc., 505 South Main St., Orange, CA 92668.

²Executive Dir., California Intercity High Speed Rail Commission, P.O. Box 942874, Sacramento, CA 94274-0001.

³Sr. Transp. Engr., Parsons Brinckerhoff Quade & Douglas, Inc., 505 South Main St., Orange, CA.

Note. Discussion open until July 1, 1997. To extend the closing date one month, a written request must be filed with the ASCE Manager of Journals. The manuscript for this paper was submitted for review and possible publication on January 26, 1996. This paper is part of the *Journal of Transportation Engineering*, Vol. 123, No. 1, January/February, 1997. ©ASCE, ISSN 0733-947X/97/0001-0001-0011/\$4.00 + \$.50 per page. Paper No. 12523.

TABLE 1. Operational Characteristics Comparison

(1)	Technology Group		
	HS (2)	VHS (3)	Maglev (4)
(a) General			
Technology	Steel wheel/steel rail	Steel wheel/steel rail	Magnetic levitation
Motive power/propulsion	Electric traction locomotives with catenary	Electric traction locomotives with catenary	Linear induction motors
(b) Operations			
Top speed	250 km/h (155 mph)	350 km/h (217 mph)	500 km/h (310 mph)
Acceleration	km/h/s (mph/s)	km/h/s (mph/s)	km/h/s (mph/s)
0–100 km/h	1.5 (0.9)	1.8 (1.1)	5.0 (3.1)
100–200	0.8 (0.5)	1.0 (0.6)	2.9 (1.8)
>200	0.3 (0.2)	0.3 (0.2)	1.8 (1.1)
Deceleration	km/h/s (mph/s)	km/h/s (mph/s)	km/h/s (mph/s)
	2.9 (1.8)	2.5 (1.6)	2.9 (1.8)
(c) Civil			
Superelevation	6° (150 mm)	7° (180 mm)	16°
Gradient*			
Maximum	3.0%	3.5%	6.0%
Absolute maximum	5.0%	5.0%	10.0%
Horizontal curvature			
Desired minimum radius	1,900 m at 200 km/h	5,300 m at 350 km/h	7,100 m at 500 km/h
At maximum speed	6,200 ft at 125 mph	17,500 ft at 217 mph	23,300 ft at 310 mph
Absolute minimum radius	1,900 m at 200 km/h	4,700 m at 350 km/h	5,500 m at 500 km/h
At maximum speed	6,200 ft at 125 mph	16,700 ft at 217 mph	18,000 ft at 310 mph
For tilt technology	1,260 m at 200 km/h	NA	NA
	4,100 ft at 125 mph	NA	NA
Vertical (sag) curvature			
Minimum radius	6,300 m at 200 km/h	19,200 m at 350 km/h	39,300 m at 500 km/h
At maximum speed	20,700 ft at 125 mph	63,000 ft at 217 mph	128,900 ft at 310 mph
Vertical (crest) curvature			
Minimum radius	7,800 m at 200 km/h	20,000 m at 350 km/h	49,000 m at 500 km/h
At maximum speed	25,600 ft at 125 mph	65,600 ft at 217 mph	160,800 ft at 310 mph
(d) Right-of-way			
Requirements	13.3 m (44 in.) min	13.3 m (44 in.) min	14.3 m (47 in.) min

*Gradients shown represent the capability of the technology group. Currently, no high-speed railroad operates at grades over 3.5%.

PHASE 1 EVALUATION

Objective

Phase 1 was an initial, broad-scale review of route alternatives between Los Angeles and the San Francisco Bay Area; its purpose was to identify feasible routes to evaluate in greater detail during subsequent study phases. Using evaluation criteria that reflected the goals of maximizing ridership, minimizing costs, and avoiding potential environmental constraints, three feasible corridors—each 4 mi in width—were identified in Phase 1: the coastal corridor, the Interstate 5 (I-5) corridor, and the SR-99 (Central Valley) corridor (see Fig. 1).

Approach/Methodology

The Phase 1 corridor analysis began with the development of evaluation criteria and identification of potential routes between Los Angeles and the San Francisco Bay Area. The broad-scale identification process considered a comprehensive range of information, including the following:

- Extensive U.S. Geological Survey (USGS) planimetric, topographical, geological, and other mapped information in both digital and paper form
- Landsat thematic mapper satellite imagery
- Field reconnaissance
- Plans of existing transportation corridors

Considering all of this information, broad-scale alignments

and profiles were developed and evaluated for the alternatives already identified in previous HSR studies and other potential HSR routes. Analysis of the corridors focused on four general elements:

1. General requirements: elements dealing with ride times and ridership potential, the configuration of the alignment (tunneling, etc.), and potential station locations and spacing.
2. Regulatory/permitting: elements dealing with conditions that may warrant extensive agency coordination and permit applications, such as parklands, National Forest lands, streambeds or wetlands, and endangered species.
3. Construction/operational: those elements addressing the relative differences in complexity of initial construction and difficulty of future maintenance.
4. Environmental/physical: elements that address geological constraints (slope stability, fault lines, and soil conditions), hazardous materials, agricultural areas, historic or archaeological resources, and conflict with existing or planned development.

This identification and evaluation process was used to rank the various alternatives so that the IHSR Commission could focus resources on the most promising routes for detailed technical analysis. To aid in the decision-making process, the Phase I evaluation criteria and subsequent analysis were categorized under three principal goals for a Los Angeles to San Francisco Bay Area HSR system. These goals are to maximize ridership potential, minimize costs, and avoid potential envi-

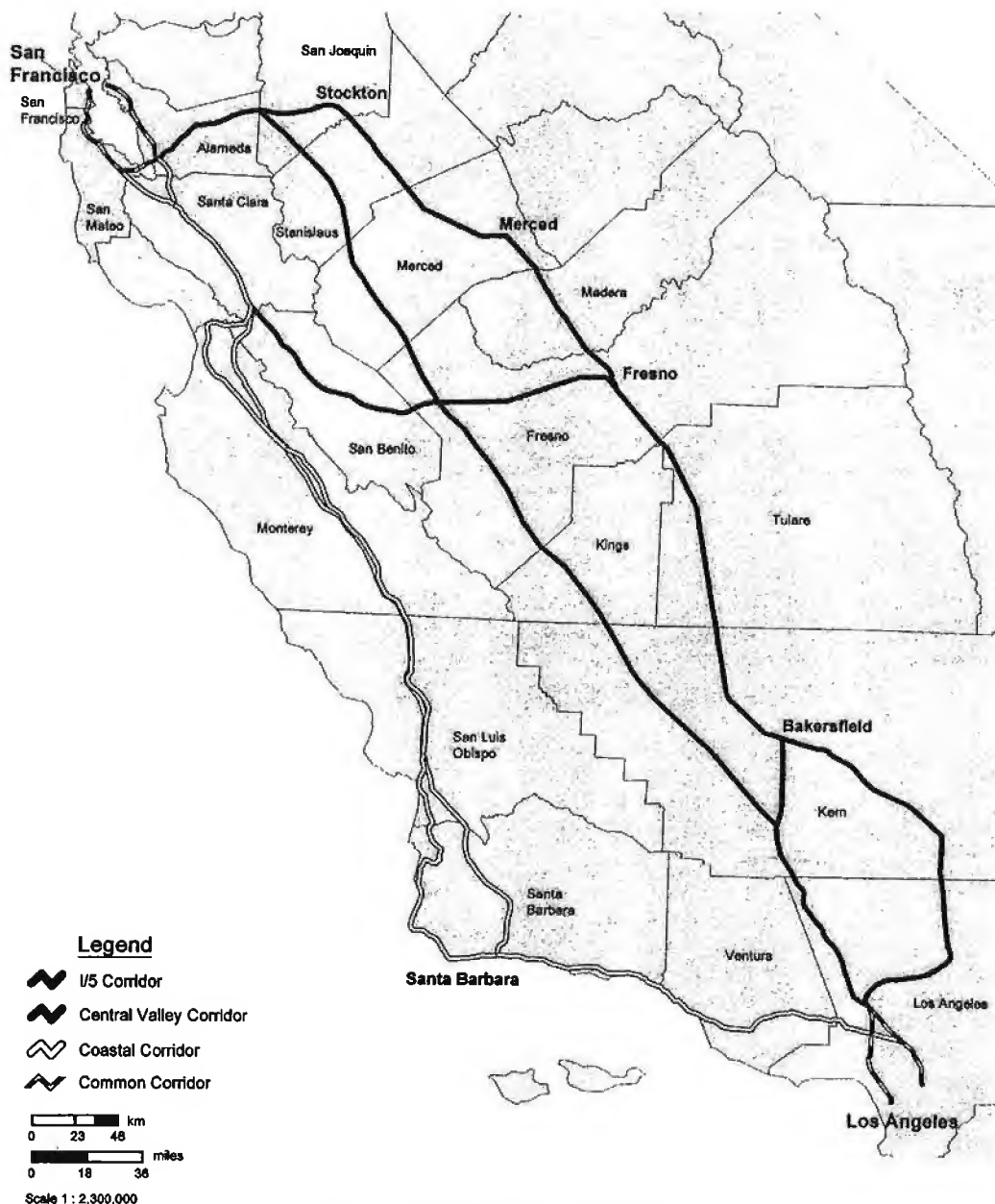


FIG. 1. HSR Study Segments: Phase 1

ronmental constraints. Each of these goals and the process used for their evaluation are described as follows.

Maximize Ridership Potential

Ridership potential is a principal measure in determining the feasibility of an HSR system. The degree to which people will use a transportation facility is a measurable indicator of its potential benefits. The financial, economic, and environmental benefits derived from HSR is highly dependent on the number of passengers using the system—the higher the ridership potential, the greater the potential for benefits.

For this initial review of HSR corridor alternatives between Los Angeles and the San Francisco Bay Area, an evaluation of preliminary ridership projections, population forecasts, and travel times between population/employment and tourist/recreational markets was made to determine the corridors that have the greatest ridership potential. Using the three alterna-

tive HSR technologies (HS, VHS, and Maglev), ridership forecasts were provided for 15 scenarios comprising five alternative alignments. The forecasts were developed by Charles River Associates (CRA), the prime consultant for the IHSR Commission's ridership demand/market analysis ("Independent" 1996) study, using mode-choice models that CRA developed and that the Federal Railroad Administration (FRA) is also using in its current national policy studies.

The input data for the HSR level-of-service characteristics used for these preliminary forecasts was provided by Parsons Brinckerhoff Quade & Douglas, Inc. Level-of-service data for the competing modes and existing origin-destination volumes by air, rail, and bus were provided to CRA by the Volpe National Transportation System Center. Estimates of auto travel in the corridor were developed by CRA using results from the California Statewide Traffic Model. While the estimates of existing volumes by each current mode were checked carefully

for reasonableness, the preliminary forecasts did not include results of CRA's new surveys then under way for the ridership demand/market analysis ("Independent" 1996) study.

Population forecasts were derived from 1990 census data and from forecasts through the year 2020 provided by McGuire & Co., a subconsultant of CRA, for the ridership demand/market analysis study. Additional sources of population projections for major metropolitan regions were councils of governments, including the Association of Bay Area Governments, Southern California Association of Governments, Sacramento Council of Governments, San Joaquin Council of Governments, San Diego Association of Governments, and Association of Monterey Bay Area Governments. For areas outside the sphere of influence of the regional councils of governments, projections were provided by municipal and county planning agencies, or developed by McGuire & Co. based on California Department of Finance parameters. The population projections were quantified by route alternatives for all tracts crossed by a 4-mi corridor strip, all tracts crossed by a 10-mi corridor strip, and all tracts within counties crossed by a 4-mi corridor strip. To determine preliminary station locations for HSR route alternatives, various data were used, including the population projections, major tourist/recreational markets, the findings of previous California HSR studies, and operational practices in Europe and Japan.

To estimate travel times between population, employment, and tourist/recreational markets, data on tourist/recreational markets within the Los Angeles to San Francisco Bay Area corridor were gathered from a variety of sources—councils of governments, chambers of commerce, visitor information centers, and other tourist information sources. With this data in hand, travel times based on train performance for each of the three technology groups were generated. (Approximate travel times were predicated based on an estimate of each technology group's speed limitations through curves and its acceleration/deceleration characteristics.) To reduce energy consumption, running times were optimized to avoid short-speed peaks; however, the train simulations were generally programmed to reach and maintain the maximum speed permitted by both the alignment and the speed potential of the respective technology. All train-running times include a schedule recovery time based on European HSR practice. For ridership forecast inputs, a 2-min dwell time at intermediate stations was assumed.

Minimize Costs

For the initial review of Phase 1 corridor alternatives, it was important to distinguish between the relative cost differences of the corridor option. This was accomplished by applying cost factors that allowed order-of-magnitude estimates to be developed for the capital costs associated with each corridor. Phase 1 capital cost estimates included station costs, program implementation costs (33%), and contingency (20%), but excluded maintenance and storage facilities, special trackwork requirements (passing lines, turnouts, etc.), and fleet procurement. System costs—including mainline track, traction power substations, signals and controls, communications, and power distribution systems—were applied on an average cost-per-length basis to account for basic HSR system and track/guideway costs. These costs are primarily dependent on the length of a particular route; for this evaluation, basic at-grade operations were assumed along the full length of each corridor.

To a large extent, capital costs along an alignment will vary according to the track/guideway configurations, such as tunnel and elevated sections, that are required to accommodate constraints associated with the terrain and land-use development along that particular route. With this in mind, separate cost factors were developed to address the costs associated with varying terrain and land cover constraints. The unit costs were

derived for various configuration elements reflecting three categories of slope steepness: level (0–3%), rolling (4–8%), and mountainous (9% and up). Because the HS/VHS and Maglev technologies have different operating characteristics—Maglev can accommodate difficult terrain with relatively less tunneling than HS/VHS—terrain unit cost factors were developed for both technologies.

The land cover cost factor accounts for the increased potential for costly configuration elements, such as structures, right-of-way, sound walls, and utility relocation, that are likely to be required in densely developed areas. These costs were developed to account for the increased potential of any of these elements in five categories of land cover: dense urban, urban, dense suburban, suburban, and undeveloped. For instance, urban land-use types and densities typically require more elevated structure for an HSR alignment than suburban and undeveloped areas. Thus, a higher incremental cost factor for elevated guideway is applied per length of alignment in urban land cover.

In addition to capital costs, the Phase 1 analysis also included estimates of operations and maintenance (O&M) costs. The largest O&M cost component is labor, which is dependent on the number of trains in service, their schedule, and other service-related factors. To obtain the overall annual train operations costs, unit rates on a per-train-mile basis were estimated for certain operating categories and applied to the quantity estimates. The unit rates used for this analysis reflect a statewide service. The quantity estimate used in the costing model was the number of annual train-miles operated in both directions between Los Angeles and the San Francisco Bay Area; this number was developed by extracting the number of daily trains from the operating scenario of the Los Angeles to San Francisco Bay Area corridor.

Avoid Potential Environmental Constraints

In selecting an HSR corridor, the avoidance of potential environmental constraints must focus on maximizing compatibility with existing and planned developments; minimizing impacts to natural, social and economic, and cultural resources; maximizing avoidance of areas with geologic and soils constraints and potential hazardous materials; and minimizing the complexity of permitting and agency coordination as well as related project costs and schedule delays. Each of these aspects was analyzed during Phase 1.

In evaluating the compatibility of HSR service with existing and planned development, it should be noted that because high-speed rail is designed to serve populated areas, it is more compatible with urban areas, rather than suburban areas or undeveloped lands. Using the aforementioned six classes of land cover—dense urban, urban, dense suburban, suburban, water, and undeveloped—the percentage of compatible development within each segment was calculated for the 4-mi buffer and compared to other corridor segments to aid in the evaluation of each corridor. The existing (1990) and projected (2020) population figures for U.S. Census tracts were also used to identify existing and projected growth patterns along each corridor segment.

To evaluate whether the implementation of HSR service would result in minimal impacts to natural resources, water resources—including rivers and lakes, such as the Santa Clara River and Pyramid Lake—were identified using USGS digital line graphs (DLGs) of hydrographic features. The RAREFIND California natural diversity database (CNDDB) was obtained to identify the sightings and habitats of federal- and state-listed threatened and endangered species, and the number of sightings and habitat areas within each corridor option was evaluated and quantified.

For socioeconomic impacts, the Phase 1 evaluation identi-

fied displacements through a land cover analysis that flagged developed areas within each segment that might require relocation. To estimate the level of displacement that could affect farmlands, digital mapping was used to identify the amount of prime and unique farmland within each corridor option. As defined by the U.S. Soil Conservation Service, prime farmland is that which can economically produce sustained high yields of basic crops, while unique farmland is land other than prime farmland that can produce sustained high-quality growth of specific high-value crops.

To determine the impact of HSR service on cultural resources, historic sites (architectural, archaeological, and monuments) and public lands (national and state parks, military installations, and Indian reservations) known from existing published resources were added to the geographic information system (GIS) database and mapped. The number of resources within each corridor option were then evaluated and quantified.

Maximize Avoidance of Areas with Geologic Soils Constraints and Potential Hazardous Materials

Geologic and soils constraints include steep slopes (9% and up), soils with high erodibility, soils with a high propensity to shrink or swell under certain soil moisture conditions, and known earthquake fault locations (active within the last 200 years). Avoidance of these areas is important because of safety concerns, potential difficulty of construction, and/or probable cost of mitigation. Slopes were identified using USGS digital elevation models (DEMs) that were processed in the GIS system. From GIS, steep slopes (over 9%) were evaluated and quantified for each corridor option.

Soil data (STATSGO data) obtained from the U.S. Department of Agriculture provided a broad identification of soil types and properties within the state. Soil characteristics, including erodibility and shrink/swell potential, were identified and quantified from the GIS database for each corridor option. Faults were also identified using the California Department of Conservation Fault Activity Map, which allowed fault activity within historic times (the last 200 years) to be quantified, including areas of known fault creep.

The Landsat Thematic Mapper data was reviewed and sites of potential hazardous materials, such as industrial areas, transportation facilities (rail staging and airports), oil fields, and petrochemical processing facilities, were identified and quantified using GIS database. The remediation of such sites can add substantial costs to construction.

Minimize the Complexity of Permitting and Agency Coordination

Federal and state permits can include such permits as the U.S. Army Corps of Engineers Section 404 permit (wetlands), California Section 1603 permit (streambed alteration), National Pollutant Discharge Elimination System (NPDES) permit, biological resource consultation/permits, historic resource requirements (Section 106), Section 4(f) requirements coordination/consultation, as well as a host of other permits and coordination, all of which can greatly add to the cost and result in substantial schedule delays if not identified and coordinated early in the planning process.

Definition and Ranking of Corridor Alternatives

Phase 1 entailed a brief initial review of route alternatives between Los Angeles and the San Francisco Bay Area in order to determine which general corridors have the most potential for HSR implementation. Fig. 1 illustrates the potential HSR routes between Los Angeles and the San Francisco Bay Area

analyzed for this phase. These routes are located within three general corridors—the coastal corridor, Interstate 5 (I-5) corridor, and the SR-99 (Central Valley) corridor—whose physical characteristics and comparative rankings are profiled as follows.

Coastal Corridor

The coastal corridor has only a few feasible HSR route options, two of which were analyzed to show a range of values within the corridor. While both of the routes analyzed follow the Southern Pacific (SP) railroad right-of-way for most of their alignment, the central portion of the shorter route—the portion between Gaviota (northwest of Santa Barbara) and Gilroy (south of San Jose)—more closely approximates the US 101 corridor.

It was determined that the coastal corridor has the least potential for HSR service with speeds of 150 mph or more. With significantly longer travel times between Los Angeles and the San Francisco Bay Area (43–97% longer than the shortest I-5 corridor option), this corridor has ridership projections considerably lower than the two other alignments. The coastal corridor's ridership projections were 24–46% lower than the shortest I-5 corridor option. Moreover, this corridor has the highest projected capital costs (24% higher than the shortest I-5 corridor option).

On the plus side for this corridor is the finding that although there are some environmental impacts that require mitigation measures (high visual impacts, high population disturbance, and a high number of historical resources that would be affected), the corridor has few major earthquake faults and HSR service will have a low impact on farmland and water resources. However, the primary benefit of the coastal corridor is the level of service it can offer to/from intermediate markets. Not only does the corridor directly serve such locations as Santa Barbara, Salinas/Monterey, San Luis Obispo, Ventura/Oxnard, and the Simi Valley, it also has the highest population (by census tract) of the three corridors evaluated in addition to containing some of California's most popular tourist/recreational markets.

Interstate 5 (I-5) Corridor

Two routes were analyzed to show an expected range of values within the I-5 corridor. The longest route generally follows the I-5 alignment through the Tehachapi Mountains and the Central Valley. This alternative crosses the Altamont Pass (west of Tracy/Stockton), closely approximating Interstate 580 (I-580) and then State Route-84 (SR-84) to reach the San Francisco Bay Area. The shortest route also follows I-5 through the Tehachapi Mountains and the Central Valley. However, this alternative uses the Panoche Pass to reach the San Francisco Bay Area (Pacheco Pass was also considered.)

In terms of environmental impacts, the I-5 corridor is largely free of problems. Although there are some environmental impacts that will require mitigation (high impacts on threatened and endangered species), this corridor has low population disturbance, low potential for encountering hazardous materials, and a low number of historical resources. However, in terms of service the corridor presents some major drawbacks for serving intermediate markets—the result of being the least compatible corridor with existing and planned development. In fact, virtually no development is envisioned along the majority of the I-5 alignment. The scarcity of development means that for the shortest I-5 route option, Kern County would be served by a station about 20 mi from downtown Bakersfield, while a Fresno County station would be about 46 mi from downtown Fresno.

When evaluating the corridor's suitability for serving the

end-to-end markets, the findings were far more positive: the I-5 corridor offers the shortest distances, lowest capital costs, fastest Los Angeles to San Francisco Bay Area travel times, and the highest overall ridership forecasts.

SR-99 (Central Valley) Corridor

There are many HSR route alternatives within the SR-99 corridor. Two of these alternatives have been analyzed to show a range of values. The longest route generally follows the SP/State Route-58 (SR-58) alignment through the Antelope Valley and the SP/State Route-99 (SR-99) alignment through the Central Valley. This alternative crosses the Altamont Pass (west of Tracy/Stockton), closely approximating I-580 and then SR-84 to reach the San Francisco Bay Area. The shortest route generally follows I-5 through the Tehachapi Mountains and the SP/SR-99 alignment through the Central Valley, then uses the Panoche Pass to reach the San Francisco Bay Area.

Based on this initial review, it was determined that the SR-99 corridor offers the best opportunities for HSR service between Los Angeles and the San Francisco Bay Area. Unlike the other two alternatives, this corridor is well suited for serving both end-to-end and intermediate markets. With travel times between Los Angeles and the San Francisco Bay Area only slightly greater than the I-5 corridor (8–17%), the SR-99 corridor also directly serves such intermediate markets as Fresno, Bakersfield, Modesto, Tracy/Stockton, Palmdale, and Lancaster.

Population projections show that much of California's growth over the next 25 years will occur in these intermediate markets; by the year 2020, the Central Valley will be home to well over a million more residents than the Coastal corridor and three to four million more than the I-5 corridor. Preliminary ridership projections indicate that the SR-99 corridor will initially attract only slightly fewer total riders than the I-5 corridor (3–6%). The corridor has the further advantage of presenting few environmental problems. The terrain is predominantly flat, with a small percentage of land area passing through steep slopes and erodible soils. Although there are some environmental impacts that will require mitigation (high impacts on water resources and farmland and a high potential for encountering hazardous materials), this corridor has high compatibility with the existing and planned development.

Phase 1 Conclusions

The findings of the Phase 1 evaluation indicated that two of the three corridors under consideration—the SR-99 and I-5 corridors—should be the focus of the detailed technical analysis for HSR service between Los Angeles and the San Francisco Bay Area. This initial review showed that these two corridors offer the most potential for service at 150 mph and over. Other findings indicate that the SR-99 corridor is well suited to serving both the end-to-end and intermediate markets, while the I-5 corridor is the best option for serving the end-to-end market from Los Angeles to the San Francisco Bay Area. The third corridor alternative, the coastal corridor, was found to be better suited for service at speeds below those examined for this study. While the Phase 1 findings indicated that the coastal corridor does not support travel times fast enough to capture a significant share of the end-to-end market, the data did demonstrate that the intermediate markets within this corridor—popular tourist/recreational markets with sizable existing populations—might well be served by a slower, relatively inexpensive service that uses existing rail infrastructure at speeds well below 150 mph.

PHASE 2 EVALUATION

Objective

Phase 2 followed up on the Phase 1 evaluation by taking two of the three original alternatives—the I-5 and SR-99 corridors—and subjecting them to a comprehensive evaluation. Both corridors were better defined than they had been in Phase 1, with a greater number of segment possibilities—58 in all—and station locations identified. As part of the Phase 2 evaluation, a number of northern and southern mountain passes were analyzed along with urban alignments in the San Francisco Bay Area and several terminal locations in southern California (i.e., the LAX/Union Station comparison). The Phase 2 engineering analysis examined the 58 segment possibilities in greater detail than that expended in Phase 1 with regard to conceptual plan and profile drawings, capital costs, and operations and maintenance costs, while the environmental analysis conducted during this phase identified potential impacts and constraints using four categories: natural environment impacts; social and cultural resources impacts; land-use impacts; and engineering/environmental constraints. Based on the potential impacts or constraints discerned within each category, the corridors were ranked “high,” “medium,” and “low.” Fig. 2 shows the corridors studied in Phase 2.

Approach/Methodology

Alignments in each of the statewide corridors were studied in accordance with horizontal and vertical alignment parameters for current HSR technology. These parameters were applied to the existing terrain in order to maximize the speed capabilities of the given technology as well as passenger comfort. Where possible, existing railway and highway corridors were followed to minimize tunneling and earthwork, which in turn helped minimize capital costs.

The alignments were initially determined using USGS and satellite imagery in a GIS environment. This placement was further refined using available maps and, in some cases, field research. Once the alignments were determined, a digital terrain model was produced along the alignments using USGS topographical information. This model was then used to determine the terrain profile along the segment. From this information, the vertical and horizontal alignments were optimized. Additional information regarding earthwork and tunneling was determined using these surface models.

The density of any urban areas that the alignment passed through, the number of grade crossings, and the terrain in a given area determined the elevation of the alignment through these areas. At several locations, it was found that the optimum vertical alignment was elevated through urban areas due to the density of at-grade crossings and space constraints. In areas where the existing grade crossings passed over the existing alignment, it appeared to be more feasible to add overcrossings or undercrossings in order to separate the grade crossings. In the interest of minimizing capital costs, these elevated segments were kept to a minimum. Plan and profile sheets were produced as a result of these studies.

Capital cost estimates were prepared for the Phase 2 alignments using a parametric approach in which the major cost elements are multiplied by a quantity to produce an estimate of total cost. For the purposes of this study, capital costs were categorized according to the following elements:

1. Alignment costs
 - Track and guideway items
 - Earthwork and related items
 - Structures, tunnels, and walls
 - Grade separations

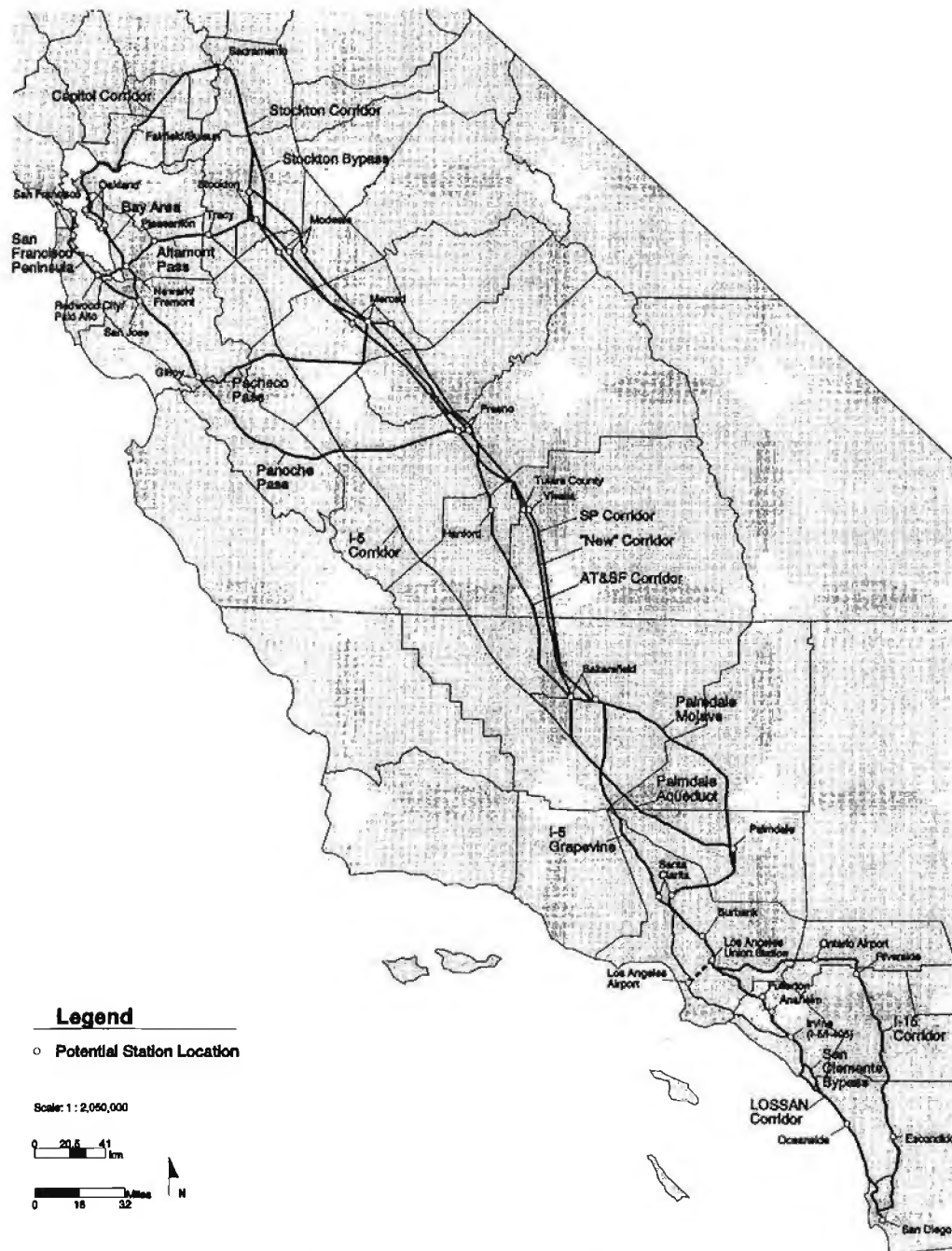


FIG. 2. Corridor Options: Phases 2 and 3

- Rail and utility relocation
- 2. System costs
 - Signaling and communications items
 - Electrification items
- 3. Passenger station costs
 - Passenger stations
 - Site development and parking
- 4. Right-of-way costs
- 5. Environmental impact mitigation costs
- 6. Vehicle costs
- 7. Support facility costs
- 8. Program implementation costs
 - Program and design management
- Final design
- Construction and procurement management
- Agency costs
- Force account costs
- Risk management
- Testing and prevenue operations
- 9. Contingencies

Operating scenarios, defined in terms of simplified daily statewide timetables, were used as the basis for estimating operating and maintenance costs between Los Angeles and the San Francisco Bay Area, including extensions to San Diego and Sacramento. Travel times were simulated in both express

and local services for each route alternative. Operations and maintenance costs were estimated based on the conceptual operating plan.

The Phase 2 analysis also entailed the identification of environmentally sensitive resources in the segments, potential impacts, possible mitigation measures, required regulatory compliance, and estimates of conceptual mitigation costs.

Definition and Ranking of Corridor Alternatives

Phase 2 of the 1996 California "High Speed Rail Corridor Evaluation & Environmental Constraints Analysis" is a review of potential HSR segment alternatives between Los Angeles and the San Francisco Bay Area. A total of 58 segments were identified and analyzed. While the majority of these segments were contained in one of two corridors—the I-5 corridor and the SR-99 corridor—some segments were common to both and the analysis also examined some segments along U.S. Highway 101 (US-101). All 58 segments analyzed during Phase 2 of the evaluation were studied in greater detail than in Phase 1, particularly in terms of potential environmental and engineering constraints. However, the focus of Phase 2 remained the same as in Phase 1, namely to determine which segments were most capable of maximizing ridership, minimizing costs, and avoiding environmental constraints. The findings of the Phase 2 analyses are summarized as follows:

I-5 Corridor versus SR-99 Corridor

Most of the I-5 corridor (80%) was found to have high (very negative) impacts on wetlands and to threatened and endangered species. Approximately half (51%) of the segments within this corridor also ranked high for socioeconomic impacts/environmental justice, regulatory compliance, and mitigation costs. In comparison, a small percentage (12%) of the segments within the SR-99 corridor had high impacts to wetlands and threatened and endangered species. Approximately, 20% of the segments within this corridor also ranked high for socioeconomic impacts/environmental justice, regulatory compliance, and mitigation costs.

Capital and operating costs for both the I-5 and the SR-99 corridors are similar. However, the SR-99 corridor is estimated to be 4–15% more costly to build than the I-5 corridor. This is primarily due to the greater length of the SR-99 corridor and the increased cost of constructing a system in developed areas. Capital costs vary because each corridor includes alternative alignments.

Although the SR-99 corridor options are somewhat more costly than those for I-5, they are projected to have the highest ridership potential in addition to offering far better service to the growing Central Valley population as well as competitive service between the Los Angeles and San Francisco Bay Area metropolitan regions. Moreover, public testimony at IHSR Commission meetings, in public resolutions, and at public workshops indicates that the public overwhelmingly favors the SR-99 corridor. Therefore, it is apparent that focusing on alternative routes within this corridor would not only be the best use of limited HSR planning resources, but also help to build public support for HSR without precluding future HSR investment in the I-5 corridor.

Station Alternatives

The study assessed the potential locations of stations for the SR-99 alignment from Los Angeles to the San Francisco Bay area as well as extensions south to San Diego and north to Sacramento. Key HSR station service areas and station site location options were identified and the role and/or types of services afforded by the different service areas and alternative

site locations were assessed. The opportunities for intermodal transportation connections to the candidate HSR stations were also identified. Fig. 2 shows the stations evaluated; it should be noted that not all of them will be incorporated into the final system configuration.

Two routes were studied into the Los Angeles area: one follows an existing rail corridor into Union Station in downtown Los Angeles, the other roughly follows Interstate 405 (I-405) to the Los Angeles International Airport along the coast. These routes are called Segment C-1 and Segment C-2, respectively. Segment C-1 ranked high (very negative) for socioeconomic impacts/environmental justice and low-moderate for all other potential environmental impacts. Segment C-2 ranked medium-high for land-use compatibility, visual and noise impacts, electromagnetic field (EMF), regulatory compliance, and mitigation costs. Capital costs were determined to be significantly higher for the Segment C-2 (LAX route) than for Segment C-1 (Union Station route) because of the former's length, proportion of aerial structures, and required reconstruction of the I-405. Segment C-1 has other advantages: the route will result in higher ridership and farebox revenues and lower capital, operating, and maintenance costs; has greater public support; and will facilitate future extensions to San Diego via Orange County or San Bernardino/Riverside.

Several options were examined for access to the Bay Area—a north-south route through San Jose and the East Bay; a route along the Peninsula to San Francisco; and a third option through Altamont Pass and the Livermore Valley, then either to Oakland, or across the Dumbarton Bridge, to downtown San Francisco. Of the segments comprising the San Jose to East Bay route, the southernmost segment received high rankings for seismic constraints and regulatory compliance. The Newark to Oakland route had no high impact rankings. Of the segments comprising the Newark to Redwood City to downtown San Francisco route, both received medium-high impact rankings for visual impacts, noise/vibration impacts, and EMF impacts. Finally, of the two segments comprising the San Jose to downtown San Francisco route, the southernmost segment had a high ranking for cultural resource impacts, visual impacts, noise/vibration impacts, EMF impacts, soils/slopes constraints, seismic constraints, and mitigation costs. In terms of costs, it was determined that capital costs would be significantly higher for the Peninsula route than for the East Bay alternative because the former is more narrowly configured, is more heavily developed, and requires a greater number of grade separations.

Northern Mountain Passes

In terms of environmental impacts, Altamont Pass received high negative rankings for wetland impacts and seismic constraints, regulatory compliance, and mitigation costs. Panoche Pass received high rankings for water resources/floodplain impacts, wetlands impacts, regulatory compliance and mitigation costs. Pacheco Pass received high rankings for water resources/floodplain impacts, wetlands impacts, soils/slopes constraints, regulatory compliance, and mitigation costs. In terms of cost, Altamont Pass is estimated to be the least costly option. Pacheco Pass will cost approximately 20% more than Altamont, while Panoche Pass will cost approximately 55% more.

Southern Mountain Passes

The I-5 Pass via the Grapevine received high rankings for wetlands impacts, air quality, and regulatory compliance. The Mojave Pass and Aqueduct Pass both received low-moderate rankings. Capital costs were determined to be lowest for the I-5 Pass and highest for the Mojave Pass with Aqueduct Pass costs falling in between.

Phase 2 Conclusions

After being presented with the findings of the Phase 2 environmental and engineering evaluation, the IHSR Commission moved to focus further study on the SR-99 (Central Valley) corridor and postpone further action on the northern and southern mountain passes as well as a specific route to the San Francisco Bay area until additional data became available. The Commission also decided that Union Station would be the most effective Los Angeles terminal location, but concluded that the method for connecting the station at LAX with Union Station should be considered separately.

PHASE 3 EVALUATION

Objective

Phase 3 entailed the same level of effort and depth for the engineering and environmental analyses as Phase 2, but the Phase 3 focus was on the corridor extensions to Sacramento and San Diego. As with the Phase 2 corridors, each of the extension corridors was analyzed in terms of alignment feasibility, operations, capital costs, and environmental impacts.

Approach/Methodology

All environmentally sensitive resources in the area of the extension segments were analyzed to identify potential impacts and possible mitigation measures, determine required regulatory compliance, and estimate conceptual mitigation costs. The conceptual plan and profile drawings and capital cost estimates were prepared using the same methodologies described in Phase 2. The operational analysis was performed in conjunction with the analysis of the entire Los Angeles to San Francisco Bay Area HSR system to address the corridors on a systemwide basis with and without the extensions.

Definition and Ranking of Corridor Alternatives

A total of seven segments were analyzed—two for the Sacramento extension and five for the San Diego extension. In addition to these seven segments, three other alternatives were evaluated: the Stockton Bypass from Stockton to Sacramento, and two alternatives for San Diego, the San Clemente Bypass and the Los Penasquitos Canyon alternative. Each segment was analyzed separately regardless of its extension corridor association. Extension segment names and locations as well as alternative segments are discussed in the following section and illustrated in Fig. 2.

Sacramento Extension

The Stockton corridor, one of the alignment options evaluated for the Sacramento extension, is 19–34% less expensive than another option, the Oakland-Sacramento Capitol corridor. The variance in the cost of the Stockton corridor is dependent on whether existing rail right-of-way is used versus a new corridor that skirts the urban areas. The shorter length of the Stockton corridor and the fact that it has fewer physical constraints than the Capitol corridor account for Stockton's lower cost.

When compared in terms of environmental impacts, neither corridor has a clear advantage over the other. The Stockton-Sacramento segment received a high ranking for air quality, land-use compatibility, and regulatory compliance, while the Capitol corridor ranked high for land-use compatibility and regulatory compliance. Overall, using either of these two corridors to extend HSR service from the San Francisco Bay Area to Sacramento will result in equal medium-to-low potential environmental impacts.

San Diego Extension

Five segments and two alternative routes for extending service from Los Angeles to San Diego were evaluated; of the five segments, three comprise the I-15 corridor. The evaluation indicated that the least expensive option to implement would be the LOSSAN corridor, which runs from Los Angeles to San Diego along I-5. That corridor would be 13–20% less expensive than the I-15 corridor depending on the alignment options in the Mission Valley and San Clemente area. This is primarily due to the shorter length of the LOSSAN corridor.

A segment of the LOSSAN corridor—the segment into San Diego—was the only one to receive a high ranking for engineering/environmental constraints. This same segment also received a medium-high ranking for soils/slopes, seismic constraints, hazardous materials/waste, regulatory compliance, and mitigation costs. All other segments received an overall low-medium ranking.

Environmental Conclusions

When compared to other intercity transportation modes, such as cars and airplanes, HSR offers significant environmental benefits: it is more energy efficient, causes less pollution, and has a better safety record. Nevertheless, it was necessary to examine how an HSR system will impact the environment and how any negative impacts can be mitigated. An environmental analysis was conducted to identify those environmental issues that could affect the system's feasibility, routing, and technology selection. This study produced an overview of environmental findings and major issues that will be critical to any future analyses of HSR options between Los Angeles and San Francisco with extensions to Sacramento and San Diego.

The environmental section of the California High Speed Rail Corridor Evaluation & Environmental Constraints Analysis'' (1996) are not meant to take the place of an environmental impact report. Instead, these sections are intended to provide a plan-level assessment of issues and concerns—summarized in the following sections—that must be addressed in greater detail after a specific route alignment has been selected. It will then be necessary to prepare full environmental documentation in which impacts and mitigation measures are identified in compliance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

Natural Environment Impacts

The Palmdale-Mojave Pass and the Palmdale-Aqueduct Pass serve as connecting routes between Los Angeles and Bakersfield. Both were rated low to low-medium for natural environment impacts and are deserving of further analysis. Of the three passes evaluated as connecting routes between Fresno and the Bay Area, two—the Altamont Pass and the Pacheco Pass—received overall medium-high impact ratings for natural environment and they too deserve more detailed analysis.

Another segment that will require further investigation is the portion of the corridor along I-15 in Riverside and San Diego counties. Additional analysis is needed there to investigate the impacts to threatened and endangered species habitat, which comprises 11.89% (1,130 acres) of the total acreage (9,500 acres) within this segment.

Social/Cultural Resources Impacts

Further investigation of socioeconomic and cultural resources are required to investigate the displacements and impacts on low income and minority areas between Los Angeles and San Diego via Riverside. Because there are only 157 mi

in this segment, the overall impacts by percentage may not be that great.

Land Use Impacts

Vibration and electromagnetic fields along the coastal (I-5) and inland (I-15) routes from Los Angeles to San Diego require additional study as do the impacts to visual quality along the coastal areas in Orange and San Diego counties. As an alternative to high-impact areas along this segment, a brief analysis of a San Clemente Bypass tunnel has been done, but the level of detail in this analysis is not sufficient to preclude a more detailed evaluation encompassing not only the bypass tunnel, but the coastal route as well.

Engineering/Environmental Constraints

Seismic and hazardous materials and waste constraints along the I-15 corridor inland route between Los Angeles and San Diego need to be further investigated.

Engineering Conclusions

Alignments were studied in each of the statewide corridors in accordance with current HSR design parameters. These parameters were applied to the existing terrain in order to maximize both the speed capabilities of a given technology group and the passenger comfort. Where possible, existing railway and highway corridors were followed to minimize tunneling, earthwork, right-of-way, and environmental impacts—all of which ultimately influence capital costs.

One of the factors affecting HSR design parameters is passenger comfort standards, which dictate that steeper grades require longer vertical curves that tend to flatten the alignment, sometimes negating the effect of the steeper grades. But somewhat surprisingly, there is little opportunity to use grades over 5% throughout the California HSR corridors. While the terrain does feature some steep slopes, they generally are not long enough to fit the steeper grades with associated vertical curve lengths. Moreover, there is a practical limit to the grades used to maintain reasonable heights above the ground on the approach to either side of a high point.

The initial alignments were configured using USGS and satellite imagery in a GIS environment. After draft horizontal alignments were determined, USGS topographical information was used to produce a digital terrain model. This model was the primary tool for determining the terrain profile along each alignment segment; the model also generated additional data pertaining to the need for earthwork and tunneling. The vertical and horizontal alignments were further refined based on constraints mapping, aerial photography, other planned transportation improvements, and field reconnaissance.

Vertical alignment was largely determined by the terrain in concert with the density of the adjacent land use and the number of grade crossings required through these areas. Within several segments in urban areas, right-of-way constraints and the density of at-grade crossings prompted a recommendation for utilizing an elevated alignment. However, the recommendation to use an elevated alignment was restricted only to segments containing numerous grade crossings in order to minimize capital costs.

Plan and profile sheets were produced with a plan view on each sheet showing a geographical map, station locations, and the horizontal alignment. The profile portion of the sheet shows the existing terrain profile, the vertical alignment, station locations, and grade-crossing call outs.

Capital Costs

Capital costs estimates were prepared for the various alignment scenarios between Los Angeles and the San Francisco Bay Area as well as the extensions to San Diego and Sacramento. These estimates were calculated using a parametric approach in which the major cost elements are multiplied by a quantity to produce an estimate of total cost. In many cases, simplifying assumptions and additional estimating procedures were applied to account for uncertainties at this preliminary level of study. The total capital cost for each complete alignment scenario included allowances for vehicles, support facilities, design, construction management, and contingencies.

Table 2 presents a summary of the capital costs estimated for HSR system alternatives. The estimates reflect current (1996) dollars. No allowance has been made in this report for escalation of the capital costs to the year of construction. In general, capital costs in California compare well with costs estimated for other HSR corridors in the nation. Other studies suggest that a reasonable range of HSR construction costs would be between \$10,000,000 and 45,000,000 depending on factors such as terrain, type and intensity of land use, geologic conditions, availability of right-of-way, and local construction methods and labor costs.

Costs in California tend to be at the upper end of the range because of seismic design issues and the higher costs of the state's construction industry. Average costs per mile for corridors in the state range from \$13,900,000/mi for relatively simple construction in the flat sparsely developed central valley to \$58,600,000/mi for very difficult construction on the congested San Francisco Bay Peninsula. Capital costs also differ depending on the technology selected. Infrastructure costs give a good indication of system cost differences. In California, infrastructure costs for HS and VHS should be about the same because the state's existing rail corridors have not been substantially improved and shared use of the existing facilities will require major renovations. Infrastructure costs for Maglev should be moderately to significantly higher than those for HS or VHS. The higher cost results primarily from Maglev's more expensive system elements (items related to guideways, signals, communications, and electrification).

TABLE 2. Capital Cost Summary

Technology (1)	Los Angeles–San Francisco Bay Area (billion dollars) (2)	Sacramento– San Diego (billion dollars) (3)
HS/VHS	11.0–16.5	17.2–24.9
Maglev	15.8–21.4	24.2–32.8

Note: Costs in 1996 dollars; ranges depend on route options and alignment variations.

TABLE 3. Operations Summary

Technology (1)	Express Travel Time		Annual Operations and Maintenance Costs	
	Los Angeles– San Francisco Bay Area (h:min) (2)	Sacramento– San Diego (h:min) (3)	Los Angeles– San Francisco Bay Area (dollars) (4)	Sacramento– San Diego (dollars) (5)
HS	3:25	4:59	228,000,000– 248,000,000	351,000,000– 368,000,000
VHS	2:42	4:15	228,000,000– 248,000,000	351,000,000– 368,000,000
Maglev	1:57	3:13	232,000,000– 252,000,000	358,000,000– 375,000,000

Note: Costs in 1996 dollars; ranges depend on route options and alignment variations.

Operations and Maintenance

Operating scenarios, defined in terms of simplified daily statewide timetables, are used as the basis for estimating operating and maintenance costs between Los Angeles and the San Francisco Bay Area, including extensions to San Diego and Sacramento. Travel times were simulated in both express and local services for each route alternative. These times, together with operations and maintenance costs, are summarized in Table 3.

APPENDIX. REFERENCES

- "High speed rail corridor evaluation & environmental constraints analysis." (1996). *Final Rep. Prepared for California Intercity High Speed Rail Commission*, Parsons Brinckerhoff/Jenkins, Gales & Martinez, Inc., Calif.
- "Independent ridership and passenger revenue projections for high speed rail alternatives in California." (1996). *Rep. Prepared for California Intercity High Speed Rail Commission*, Charles River Associates, Boston, Mass.

Wasco-Shafter Agricultural Group

P.O. Box 1200
Wasco, California 93280

May 6, 2014

California High Speed Rail Authority
770 L Street, Suite 800
Sacramento, California 95814
fresno_bakersfield@hsr.ca.gov

RE: Final Environmental Impact Report/Environmental Impact Statement (Final EIR/EIS) for the Fresno to Bakersfield Section of the High Speed Rail Project

Members of the High Speed Rail Authority Board of Directors:

The Wasco-Shafter Agricultural Group appreciates the opportunity to review and comment on the Final EIR/EIS for the Fresno to Bakersfield segment of the High Speed Rail Project issued by the High Speed Rail Authority (HSRA). The Wasco-Shafter Ag Group consists of 125 ag related entities and organizations in the Wasco and Shafter area.

The Wasco-Shafter Ag Group again voices its support for the BNSF Alignment in the Wasco-Shafter area as being the preferred alternative, as opposed to the ByPass Alternative, as it best suits the community and the desires of the stakeholders in that community. The BNSF Alignment is the best choice as it has reduced impacts on agricultural land, commercial and industrial uses, oil and gas production, and makes the best use of the existing infrastructure.

The Final EIR/EIS responds to comments made on the Draft EIR/EIS in that it in many cases addresses the realities of, and the impacts high speed rail will have on that community. There are several areas that demonstrate this:

- Wetlands – the Final EIR indicates that “it is noteworthy that none of these waters are wetlands and are instead man-made features installed in uplands for agricultural purposes, such as irrigation return-flow detention basins and irrigation canals (see Section 3.7, Biological Resources). It is equally important that these man-made features are in poor condition for aquatic habitat and that the functions and services provided by these aquatic features can be restored by rerouting canals and ditches or by creating additional capacity in detention basins.” This is a case where further research pointed to the fact that the By Pass was not the “preferred alternative” when it came to wetlands as a deciding factor.
- Setbacks – There was a recognition that beyond the edge of the right of way, there is an area where farmland will be taken out of production because farmers need an area in which to turn

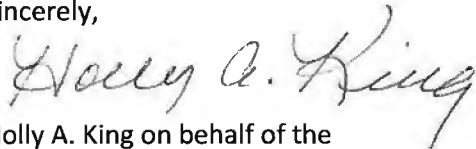
their equipment around – a constraint created because of HSR. Mitigation is now proposed for this area – albeit smaller than what we think is appropriate, but yet recognized.

- Bifurcation of Farmland Diagonally – due to this approach if the By Pass Alternative had been chosen, the largest two impacts would have been to the irrigation systems and equipment movement. Bisecting an irrigation system will be very costly as you essentially will have to have two systems designed and replicated – at a huge cost. Equipment movement is acknowledged in the Final EIR and the fact that movement will add one to two miles of additional driving one way. The Final EIR/EIS inappropriately downplays the hardship associated with the additional use of labor, fuel and wear and tear on equipment.
- Remnant Parcels – The Final EIR/EIS recognizes that remnant parcels will be created and many will not be economically viable. It also recognizes that it will be challenging to individual landowners as they will likely want to sell the remnant parcel to the farmer across the tracks closest to the parcel that is now un-useable to him/her. The subdivision map act will make this problematic and the Authority has created their Farmland Consolidation Program to either purchase the remnant parcel or work through the process with the landowner.
- Oil and Gas Wells - In the Wasco-Shafter area, there is the added “feature” of oil and gas wells. Not only does the By Pass Alternative go through an existing oil field that is heavily populated with oil and gas wells, but the advent of hydraulic fracturing will only add to the cost, safety, and relocation uncertainties associated with constructing the project in an existing and rapidly expanding oil field if placed on the By Pass Alternative, making the BNSF the preferred choice.
- Bees and Pollination - Protection of the bees and the quality of the environment for them is of utmost importance. The research fund to be set up to further explore the impacts of high speed rail related to wind, noise and dust is certainly appropriate.

Many of the farmers in the Wasco-Shafter Ag Group have property impacted by both alignments. In our own personal analyses, the BNSF alignment is far superior for many of the reasons stated previously – less impact to prime agricultural and Williamson Act land, reduced cost to redesign irrigation systems, less cost to relocate oil and gas wells, less remnant parcels created, fewer road closures – and the list goes on.

As a Group, we support certification by the Board of the Final EIR/EIS.

Sincerely,

A handwritten signature in cursive script that reads "Holly A. King". The signature is written in dark ink and is positioned above the printed name.

Holly A. King on behalf of the
Wasco-Shafter Agricultural Group

April 29, 2014



California High-Speed Rail Authority Board
Attn: Dan Richard, Chairman
770 L Street, Suite 800
Sacramento, CA 95814

RE: Final EIR/EIS Fresno to Bakersfield Section

Dear Chairman Richard and Board Members:

I am writing to request an extension of the review period for the Final EIR/EIS Fresno to Bakersfield Section. News of the April 18, 2014 release of the Final EIR/EIS reached me Easter weekend while traveling out of state. The release which coincided with Good Friday, a holiday for many, was a surprise since it was widely anticipated the release would occur end of April or early May. On April 21st, during my travels, I telephoned the Authority to request a CD ROM which was promptly sent via Fed Ex. Upon my return yesterday, April 28th, my neighbor delivered the Fed Ex envelope to me. I suspect that I was not the only one traveling Easter week during what is traditionally spring break for many families.

The short 17 day period to review this extensive document of nearly 4,800 pages presents an onerous burden for the individual citizen to read and understand the problems and remedies presented in the Final EIR/EIS. Additionally, it is unclear how any comments from the public would be addressed and incorporated into the Final EIR/EIS prior to the Board's vote on May 7, 2014. Ending public comment on May 6th and the Board's voting on the following day, May 7th, is a charade.

As a stakeholder who has been carefully following the high-speed train project since early in 2011, my perception is that any public comments on the Final EIR/EIS is a totally fruitless exercise. It would certainly help in restoring the credibility of the Board to postpone its vote and extend the review and comment period. There needs to be a period of time between the end of public comments and the Board vote to at least give the appearance that interested parties are being heard.

California High-Speed Rail Authority Board
Attn: Dan Richard, Chairman
April 29, 2014
Page 2

Please extend the public comment period to Friday, May 30, 2014 to allow a reasonable time for interested parties and stakeholders to comprehend this voluminous document.

Sincerely,

William C. Descary

Cc: City of Bakersfield
David Valenstein, Federal Railroad Administration

The items you see are the TRUE stumps of Chicago's Elevated Rail Train's 9 inch width **anchor bolts** for their elevated light rail's overpass structures!!! - now shrunk to fractions!



If the three entities: (1) the President of the U.S.A. who is from the (2) State of Illinois and the (3) Chicago Transit Authority - all can't maintain this transit train system any better than this – then how in the “heck” can these dreaming idiots and the State of California build and maintain a California High Speed Rail?

The shocking truth is: they know this information already!



These photographs have been presented the the California High Speed Rail Board before! The leading politicians in this effort and their cronies all know better! Dianne Feinstein's husband Richard C. Blum owns many of the companies involved with all this vane fraudulent effort to build High Speed Rail anywhere in the U.S.A. He doesn't care where it's built, just so that it gets started somewhere. Why? Because his engineering companies and the related companies that he owns are all collecting fees and getting rich off from poor people in the San Joaquin Valley and elsewhere. STOP - this **criminal behavior** and join me in placing and executing a CLASS ACTION **criminal citizen's arrest** - charging many key government officials of criminal **PUBLIC mismanagement of public government funds**, starting with the present and former **High Speed Rail Board Chairmen** and Members and working up to the **Governor of the State of California** and working all the way up to the President of the United States. They are criminals, knowing full well of their deeds and criminal misconduct, and are guilty of theft greater than any other fraud perpetrated on the people of the United States and in the history of this country!!!

Please write: David Wells – P. O. Box 1733 – Fresno, Calif. 93717 - for directions to FORM AND hold an organizational meeting on this theme of “group class action” **citizen's arrest**, so that we can administrate and execute a Class Action CITIZEN'S ARREST on this criminal penal code matter and see TRUE justice done!

L

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101 South Ridgeland Avenue, Oak

Search Maps



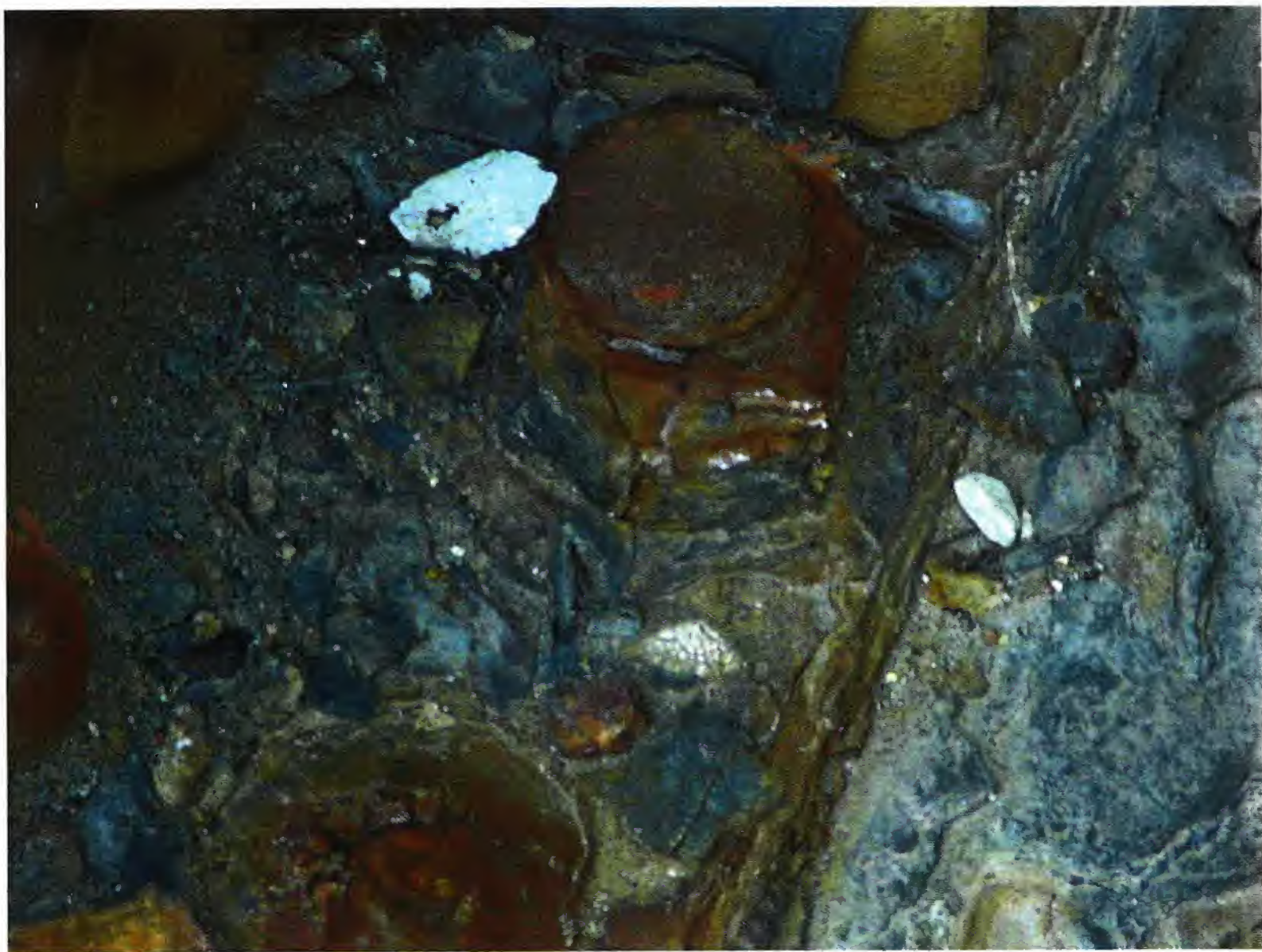
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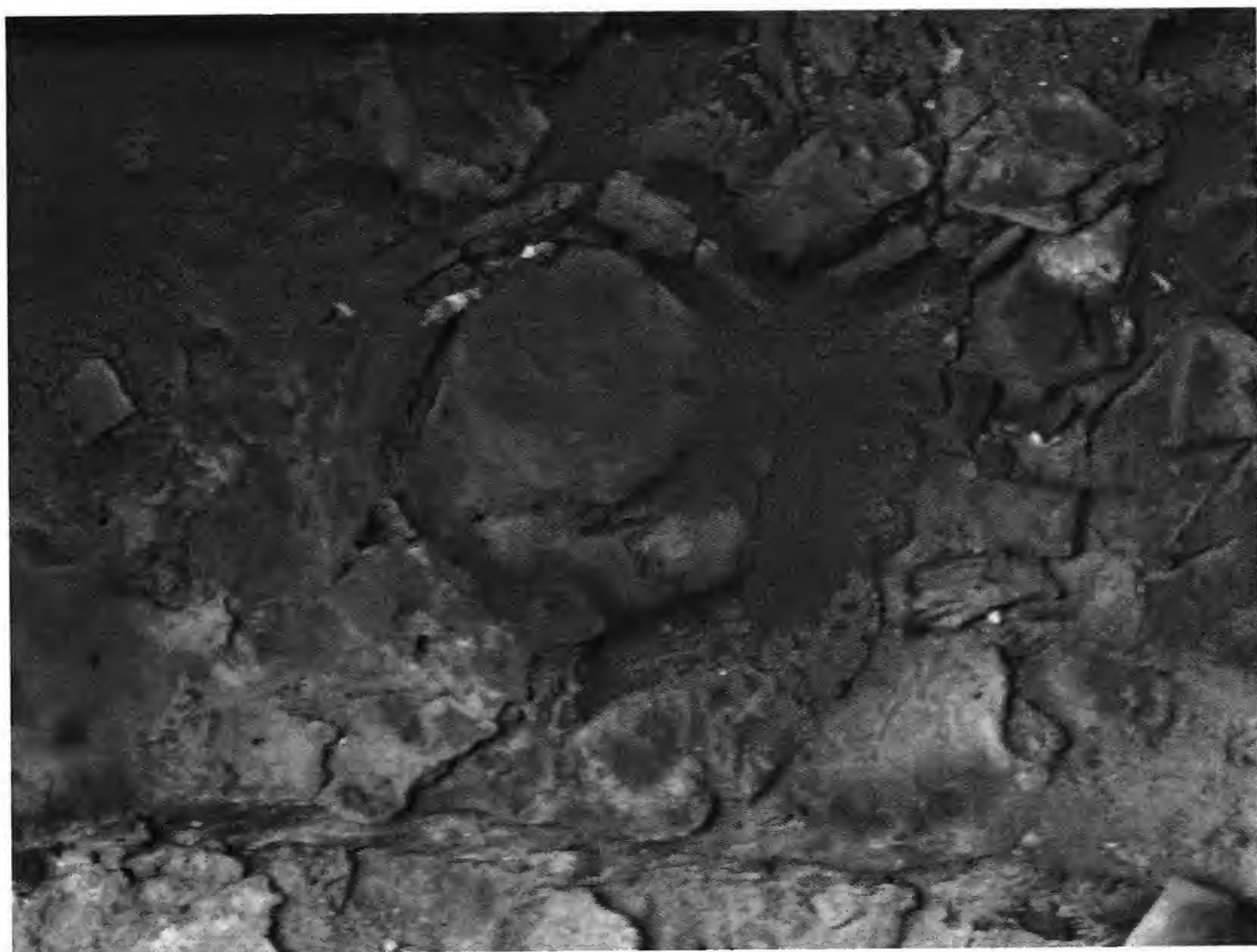
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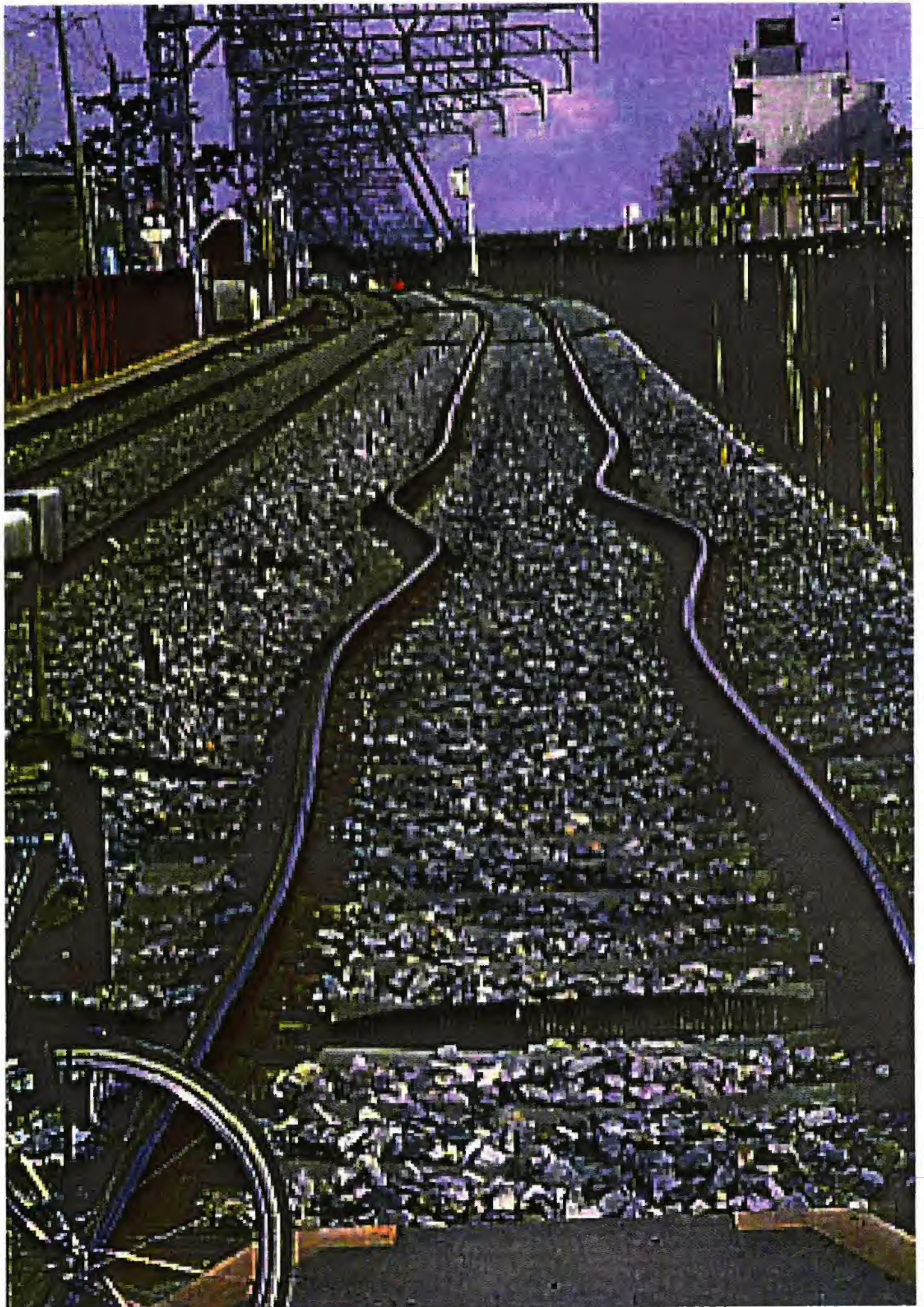








-  Screenshot-1-101 S. Ridgeland Ave. in Oak Park, IL 60302.png
 -  Screenshot-2-101 S. Ridgeland Ave. in Oak Park, IL 60302.png
 -  Screenshot-3-101 S. Ridgeland Ave. in Oak Park, IL 60302.png
 -  Screenshot-4-101 S. Ridgeland Ave. in Oak Park, IL 60302.png
 -  Screenshot-5- 425 South Blvd. in Oak Park, Ill.png
 -  Screenshot-6- 425 South Blvd. in Oak Park, Ill.png
 -  Screenshot-7- 425 South Blvd. in Oak Park, Ill.png
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April 29, 2014



California High-Speed Rail Authority Board
Attn: Dan Richard, Chairman
770 L Street, Suite 800
Sacramento, CA 95814

RE: Final EIR/EIS Fresno to Bakersfield Section

Dear Chairman Richard and Board Members:

I am writing to request an extension of the review period for the Final EIR/EIS Fresno to Bakersfield Section. News of the April 18, 2014 release of the Final EIR/EIS reached me Easter weekend while traveling out of state. The release which coincided with Good Friday, a holiday for many, was a surprise since it was widely anticipated the release would occur end of April or early May. On April 21st, during my travels, I telephoned the Authority to request a CD ROM which was promptly sent via Fed Ex. Upon my return yesterday, April 28th, my neighbor delivered the Fed Ex envelope to me. I suspect that I was not the only one traveling Easter week during what is traditionally spring break for many families.

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California High-Speed Rail Authority Board
Attn: Dan Richard, Chairman
April 29, 2014
Page 2


Please extend the public comment period to Friday, May 30, 2014 to allow a reasonable time for interested parties and stakeholders to comprehend this voluminous document.

Sincerely,

William C. Descary

Cc: City of Bakersfield
David Valenstein, Federal Railroad Administration

May 6, 2014



California High-Speed Rail Authority Board
Attn: Dan Richard, Chairman
770 L Street, Suite 800
Sacramento, CA 95814

RE: Final EIR/EIS Fresno to Bakersfield Section

Dear Chairman Richard and Board Members:

I appreciate the opportunity to comment on the Final EIR/EIS Fresno to Bakersfield Section. Holding the Board meeting in the afternoon into the evening instead of the normal morning meeting is also appreciated. Nevertheless, it is apparent there is no time before the beginning of tomorrow morning's Board meeting for incorporating my comments or those of others into the document the Board will certify/approve (Agenda items 5 & 6).

As a forty year resident of Bakersfield, my focus is twofold, the approved alignment through Bakersfield and the number of CEQA Levels of Significance after Mitigation.

First, it is important to recall that the original Draft EIR/EIS included two so-called alignments through Bakersfield, a red line and a blue line. Stakeholders quickly recognized the two alignments as minor variations of essentially the same alignment. As a result, the Revised Draft EIR/EIS included the Bakersfield Hybrid Alignment which was a third variation of the same alignment, all within several hundred feet of one another. No significant alternative alignments were ever presented, i.e. an alignment west and south of the City. Such an alignment would save construction costs and spare an unsightly elevated track ranging from 30 to 90 feet cutting through the City. Additionally, it would save the destruction of significant infrastructure. Yet, at its November 2013 meeting the Authority Board adopted the Bakersfield Hybrid Alignment which will destroy the City's identity and its character, federally funded projects, churches, schools, businesses, the Bakersfield Homeless Center and Mercy Hospital.

My second concern centers around Table S-3 (HST Mitigation Measures). Beginning on pages 78 - 90 there are six (6) CEQA Significant Impacts after Mitigation. Similarly, on

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these pages there are twenty-two (22) impacts noted as "Less than Significant." To have this number of impacts in a Final EIR/EIS within City limits should be unacceptable to the Board. Therefore, Board certification/approval is premature. Until these impacts can be further addressed with stakeholders Board action should be deferred.

Sincerely,

William C. Descary

Cc: City of Bakersfield
David Valenstein, Federal Railroad Administration